

# **TITLE 327 WATER POLLUTION CONTROL BOARD**

## **PROPOSED RULE AS PRELIMINARILY ADOPTED**

**LSA Document #05-255**

### **DIGEST**

Amends 327 IAC 8-2-8.2, 327 IAC 8-2.5-6, 327 IAC 8-2.5-7, 327 IAC 8-2.5-8, 327 IAC 8-2.5-9, 327 IAC 8-2.6-6, 327 IAC 8-11-1, 327 IAC 8-12-1, 327 IAC 8-12-2, 327 IAC 8-12-3, 327 IAC 8-12-3.2, 327 IAC 8-12-3.4, 327 IAC 8-12-3.6, 327 IAC 8-12-4, 327 IAC 8-12-6, 327 IAC 8-12-7, and 327 IAC 8-12-7.5 and adds 327 IAC 8-12-3.5 and 327 IAC 8-12-4.5 concerning sanitary surveys and operator certification. Effective 30 days after filing with the Secretary of State.

### **HISTORY**

First Notice of Comment Period: October 1, 2005, Indiana Register (29 IR 219).

Second Notice of Comment Period: December 1, 2005, Indiana Register (29 IR 1020).

Notice of First Hearing: December 1, 2005, Indiana Register (29 IR 1020).

Date of First Hearing: February 8, 2006.

**327 IAC 8-2-8.2**

**327 IAC 8-2.5-6**

**327 IAC 8-2.5-7**

**327 IAC 8-2.5-8**

**327 IAC 8-2.5-9**

**327 IAC 8-2.6-6**

**327 IAC 8-11-1**

**327 IAC 8-12-1**

**327 IAC 8-12-2**

**327 IAC 8-12-3**

**327 IAC 8-12-3.2**

**327 IAC 8-12-3.4**

**327 IAC 8-12-3.5**

**327 IAC 8-12-3.6**

**327 IAC 8-12-4**

**327 IAC 8-12-4.5**

**327 IAC 8-12-6**

**327 IAC 8-12-7**

**327 IAC 8-12-7.5**

**SECTION 1. 327 IAC 8-2-8.2 IS AMENDED TO READ AS FOLLOWS:**

#### **327 IAC 8-2-8.2 Sanitary surveys**

**Authority: IC 13-13-5-1; IC 13-14-8-2; IC 13-14-8-7; IC 13-18-3-2**

**Affected: IC 13-12-3-1; IC 13-13-5-2; IC 13-14-9; IC 13-18-11**

Sec. 8.2. (a) Public water systems ~~which~~ **that** do not collect five (5) or more routine samples per month must undergo an initial sanitary survey by June 29, 1994, for community public water systems and June 29, 1999, for noncommunity water systems. Thereafter, **for systems using ground water, and from the above date until December 31, 2001, for Subpart**

**H systems**, systems must undergo another sanitary survey every five (5) years or more frequently, as determined by the commissioner, except that noncommunity water systems using only protected and disinfected ground water, as determined by the commissioner, must undergo subsequent sanitary surveys at least every ten (10) years after the initial sanitary survey.

**Beginning January 1, 2002, Subpart H systems must undergo sanitary surveys every three (3) years.** The commissioner must review the results of each sanitary survey to determine:

- (1) whether the existing monitoring frequency is adequate; and
- (2) what measures the system needs to undertake to improve drinking water quality.

(b) In conducting a sanitary survey of a system using ground water after ~~EPA the~~ **commissioner** approves a wellhead protection program under ~~Section 1428 of the Safe Drinking Water Act, 327 IAC 8-4.1,~~ information on sources of contamination within the delineated wellhead protection area that was collected in the course of developing and implementing the program should be considered instead of collecting new information if the information was collected since the last time the system was subject to a sanitary survey.

(c) Sanitary surveys must be performed by the commissioner or an agent approved by the commissioner. The public water system must ensure that the sanitary survey takes place. **The public water system shall ensure that the commissioner or agent approved by the commissioner has access to the public water system and its records in order to verify compliance with this article and the federal Safe Drinking Water Act (42 U.S.C.A. 300f through 42 U.S.C.A. 300j-26).**

(d) The department shall evaluate each Subpart H system during a sanitary survey in accordance with this section to determine if significant deficiencies exist. Examples of significant deficiencies include the following:

(1) Significant source deficiencies, including the following:

- (A) Raw water quality monitoring that is indicative of an immediate sanitary risk.
- (B) Activities or pollution sources in the immediate source water area that will cause sanitary risks.
- (C) Location of a well making it vulnerable to surface water run-off.
- (D) Age of the well.
- (E) Reliability of the source, including quality or quantity.
- (F) A well that is not properly sealed.
- (G) Spring boxes that are poorly constructed or subject to flooding.

(2) Significant treatment deficiencies, including the following:

- (A) Inadequate disinfection contact time.
- (B) One (1) or more of the treatment processes is incapable of producing water that meets standards under all conditions of raw water quality.
- (C) No provisions to warn operators of membrane failures.
- (D) Failure to have a disinfection profile required under 327 IAC 8-2.6-2 or 327 IAC 8-2.6-2.1.
- (E) Evaluation of handling storage, use, and application of treatment chemicals.
- (F) A review of the treatment process that includes assessment of the:

- (i) operation;
  - (ii) maintenance;
  - (iii) record keeping; and
  - (iv) management practices;
 of treatment facilities.
- (3) Significant distribution and transmission deficiencies, including the following:
  - (A) Customers receiving, and using for drinking water, raw water from the raw water transmission main.
  - (B) A raw water transmission main equipped with a bypass around the treatment.
  - (C) Disinfectant residuals in the distribution system that regularly do not meet minimum required levels.
  - (D) Pressures in the distribution system below twenty (20) pounds per square inch (psi) during peak flow conditions.
  - (E) High leakage rates that pose unacceptable risks of back siphonage.
- (4) Significant finished water storage deficiencies, including the following:
  - (A) Inadequate:
    - (i) elevation of storage facilities; or
    - (ii) sealing of tank to prevent entry of contaminants.
  - (B) Failure to inspect elevated tank for sanitary defects.
- (5) Significant pumps, pump facilities, and control deficiencies, including the following:
  - (A) Storage of materials at the pumping station that:
    - (i) offer potential for contamination of the water; or
    - (ii) pose safety risks to operators.
  - (B) Cross connections are present.
  - (C) Auxiliary power is necessary to keep pressures above twenty (20) psi during commonly experienced power outages.
  - (D) Pump and facilities are not:
    - (i) designed appropriately; or
    - (ii) properly operated and maintained.
- (6) Significant monitoring, reporting, and data verification deficiencies, including the following:
  - (A) The system has multiple violations for one (1) or more contaminants or disinfectant residuals.
  - (B) Operators are using improper procedures or methods when conducting on-site laboratory analyses.
  - (C) The system:
    - (i) is not using a certified laboratory;
    - (ii) has been falsifying data; or
    - (iii) fails to collect required samples.
- (7) Significant system management and operations deficiencies, including the following:

**(A) The system has inadequate personnel to meet the requirements of 327 IAC 8-12.**

**(B) The system has not:**

- (i) developed a plan for provision of water during emergencies; or**
- (ii) completed required vulnerability assessments and emergency action plans as required by Section 1433 of the Safe Drinking Water Act (42 U.S.C. 300i-2).**

**(C) The system does not have an annually updated emergency action plan.**

**(8) Failure to comply with the requirements of this article, including the failure to have a certified operator of the proper grade for more than forty-five (45) days.**

**(9) Any additional deficiencies that are found during a sanitary survey or other site visit that may have a potential to cause an immediate risk to human health.**

**(e) Subpart H systems shall respond in writing to any significant deficiency found during a sanitary survey and reported to the system by the commissioner. Response requirements are as follows:**

**(1) The response must:**

**(A) be made within forty-five (45) days of receipt of the report; and**

**(B) indicate:**

- (i) how the public water system will address significant deficiencies found during the sanitary survey; and**
- (ii) on what schedule the public water system will address significant deficiencies found during the sanitary survey.**

**(2) The report must indicate whether significant deficiencies found during the sanitary survey are under the control of the public water system.**

**(f) If a comprehensive performance evaluation is required under 327 IAC 8-2.6-5, the public water system shall implement any follow-up recommendations that result as part of the program.**

**(g) The commissioner may require a shorter time frame for response or addressing significant deficiencies if the commissioner determines the system poses an immediate health risk.**

**(h) The commissioner may initiate an enforcement referral for violations under this rule, including failure to do the following:**

- (1) Respond to the notice.**
- (2) Address significant deficiencies under the control of the public water system.**
- (3) Provide a schedule required under subsection (e)(1)(B)(ii).**
- (4) Follow the schedule required under subsection (e)(1)(B)(ii).**
- (5) Address significant deficiencies that have significant potential to have adverse effects on human health.**

*(Water Pollution Control Board; 327 IAC 8-2-8.2; filed Dec 28, 1990, 5:10 p.m.: 14 IR 1022; filed Apr 12, 1993, 11:00 a.m.: 16 IR 2158)*

**SECTION 2. 327 IAC 8-2.5-6 IS AMENDED TO READ AS FOLLOWS:**

**327 IAC 8-2.5-6 Monitoring requirements; disinfectant residuals, disinfection byproducts, and disinfection byproducts precursors**

**Authority:** IC 13-13-5-1; IC 13-14-8-2; IC 13-14-8-7; IC 13-18-3-2

**Affected:** IC 13-12-3-1; IC 13-13-5-2; IC 13-14-9; IC 13-18-11

Sec. 6. (a) General monitoring requirements for disinfectant residuals, disinfection byproducts, and disinfection byproducts precursors are as follows:

- (1) Systems shall take all samples during normal operating conditions.
- (2) Systems may consider multiple wells drawing water from a single aquifer as one (1) treatment plant for determining the minimum number of TTHM and HAA5 samples required. **The commissioner must approve all instances of multiple wells that are considered a single treatment plant because they draw water from a single aquifer.**
- (3) Failure to monitor:
  - (A) in accordance with the monitoring plan required under subsection (f) is a monitoring violation; **and**
  - ~~(4) Failure to monitor~~ (B) will be treated as a violation for the entire period covered by the annual average where compliance is based on a running annual average of monthly or quarterly samples or averages and the system's failure to monitor makes it impossible to determine compliance with MCLs or MRDLs.
- ~~(5)~~ (4) Systems may use only data collected under the provisions of subsection (b) or 40 CFR 141.140 through 40 CFR 141.144\* to qualify for reduced monitoring.
- (b) Monitoring requirements for disinfection byproducts are as follows:
  - (1) TTHM and HAA5 monitoring requirements are as follows:

(A) For routine monitoring, systems shall monitor at the frequency indicated in the following table:

ROUTINE MONITORING FREQUENCY FOR TTHM AND HAA5		
Type of System	Minimum Monitoring Frequency	Sample Location in the Distribution System
Subpart H system serving at least 10,000 persons	4 water samples per quarter per treatment plant	At least 25% of all samples collected each quarter at locations representing maximum residence time. Remaining samples taken at locations representative of at least average residence time in the distribution system and representing the entire distribution system, taking into account number of persons served, different sources of water, and different treatment methods <sup>1</sup> .

Subpart H system serving from 500 to 9,999 persons	1 water sample per quarter per treatment plant	Locations representing maximum residence time <sup>1</sup> .
Subpart H system serving fewer than 500 persons	1 sample per year per treatment plant during month of warmest water temperature	Locations representing maximum residence time <sup>1</sup> . If the sample (or average of annual samples, if more than one sample is taken) exceeds the MCL, the system must increase monitoring to 1 sample per treatment plant per quarter, taken at a point reflecting the maximum residence time in the distribution system, until the system meets reduced monitoring criteria in clause (D).
System using only ground water not under direct influence of surface water using chemical disinfectant and serving at least 10,000 persons	1 water sample per quarter per treatment plant <sup>2</sup>	Locations representing maximum residence time <sup>1</sup> .
System using only ground water not under direct influence of surface water using chemical disinfectant and serving fewer than 10,000 persons	1 sample per year per treatment plant <sup>2</sup> during month of warmest water temperature	Locations representing maximum residence time <sup>1</sup> . If the sample (or average of annual samples, if more than 1 sample is taken) exceeds the MCL, the system must increase monitoring to 1 sample per treatment plant per quarter, taken at a point reflecting the maximum residence time in the distribution system, until the system meets criteria in clause (D) for reduced monitoring.

<sup>1</sup>If a system elects to sample more frequently than the minimum required, at least twenty-five percent (25%) of all samples collected each quarter, including those taken in excess of the required frequency, must be taken at locations that represent the maximum residence time of the water in the distribution system. The remaining samples must be taken at locations representative of at least average residence time in the distribution system.

<sup>2</sup>Multiple wells drawing water from a single aquifer may be considered one (1) treatment plant for determining the minimum number of samples required.

(B) Systems may reduce monitoring, except as otherwise provided, in accordance with the following table:

REDUCED MONITORING FREQUENCY FOR TTHM AND HAA5		
IF YOU ARE A:	AND YOU HAVE MONITORED AT LEAST ONE YEAR AND YOUR:	YOU MAY REDUCE MONITORING TO THIS LEVEL:
Subpart H system serving at least 10,000 persons that has a source water annual average TOC level, before any treatment, $\leq 4.0$ mg/L	TTHM annual average $\leq 0.040$ mg/L and HAA5 annual average $\leq 0.030$ mg/L	1 sample per treatment plant per quarter at distribution system location reflecting maximum residence time
Subpart H system serving from 500 to 9,999 persons that has a source water annual average TOC level, before any treatment, $\leq 4.0$ mg/L	TTHM annual average $\leq 0.040$ mg/L and HAA5 annual average $\leq 0.030$ mg/L	1 sample per treatment plant per year at distribution system location reflecting maximum residence time during month of warmest water temperature. NOTE: Any Subpart H system serving fewer than 500 persons may not reduce its monitoring to less than <del>one</del> 1 sample per treatment plant per year.
System using only ground water not under direct influence of surface water using chemical disinfectant and serving at least 10,000 persons	TTHM annual average $\leq 0.040$ mg/L and HAA5 annual average $\leq 0.030$ mg/L	1 sample per treatment plant per year at distribution system location reflecting maximum residence time during month of warmest water temperature
System using only ground water not under direct influence of surface water using chemical disinfectant and serving fewer than 10,000 persons	TTHM annual average $\leq 0.040$ mg/L and HAA5 annual average $\leq 0.030$ mg/L for <del>two</del> 2 consecutive years OR TTHM annual average $\leq 0.020$ mg/L and HAA5 annual average $\leq 0.015$ mg/L for 1 year	1 sample per treatment plant per 3 year monitoring cycle at distribution system location reflecting maximum residence time during month of warmest water temperature, with the 3 year cycle beginning on January 1 following quarter in which system qualifies for reduced monitoring

(C) Systems on a reduced monitoring schedule may remain on that reduced schedule as long as the average of all samples taken in the year (for systems that must monitor quarterly) or the result of the sample (for systems that must monitor ~~no~~ **not** more frequently than annually) is ~~no~~ **not** more than sixty-thousandths (0.060) milligram per liter and forty-five thousandths (0.045) milligram per liter for TTHMs and HAA5, respectively. Systems that do not meet these levels shall resume monitoring at the frequency identified in the table contained in clause (A) (minimum monitoring frequency column) in the quarter immediately following the monitoring period in which the system exceeds those levels. For systems using only ground water not under the direct influence of surface water and serving fewer than ten thousand (10,000) persons, if either the:

(i) TTHM annual average is greater than eighty-thousandths (0.080) milligram per liter; or ~~the~~

(ii) HAA5 annual average is greater than ~~sixty-thousandth~~ **sixty-thousandths** (0.060) milligram per liter;

the system shall go to the increased monitoring identified in the table contained in clause (A) (sample location column) in the quarter immediately following the monitoring period in which the system exceeds those levels.

(D) Systems on increased monitoring may return to routine monitoring if, after at least one (1) year of monitoring, their:

(i) TTHM annual average is equal to or less than sixty-thousandths (0.060) milligram per liter; and ~~their~~

(ii) HAA5 annual average is equal to or less than forty-five thousandths (0.045) milligram per liter.

(E) A system may return to routine monitoring at the commissioner's discretion.

(2) CWSs and NTNCWSs using chlorine dioxide for disinfection or oxidation must conduct monitoring for chlorite as follows:

(A) Routine monitoring is as follows:

(i) Systems shall take daily samples at the entrance to the distribution system. For any daily sample that exceeds the chlorite MCL, the system shall take additional samples in the distribution system the following day at the locations required by clause (B), in addition to the sample required at the entrance to the distribution system.

(ii) Systems shall take a three (3) sample set each month in the distribution system. The system shall take one (1) sample at each of the following locations:

(AA) Near the first customer.

(BB) At a location representative of average residence time.

(CC) At a location reflecting maximum residence time in the distribution system.

Any additional routine sampling must be conducted in the same manner (as three (3) sample sets, at the specified locations). The system may use the results of



additional monitoring conducted under clause (B) to meet the requirement for monitoring in this clause.

(B) On each day following a routine sample monitoring result that exceeds the chlorite MCL at the entrance to the distribution system, the system shall take three (3) chlorite distribution system samples at the following locations:

- (i) As close to the first customer as possible.
- (ii) In a location representative of average residence time.
- (iii) As close to the end of the distribution system as possible **at a point reflecting maximum residence time in the distribution system.**

(C) Monitoring for chlorite may be reduced as follows:

- (i) Chlorite monitoring at the entrance to the distribution system required by clause (A)(i) may not be reduced.
- (ii) Chlorite monitoring in the distribution system required by clause (A)(ii) may be reduced to one (1) three (3) sample set per quarter after one (1) year of monitoring where no individual chlorite sample taken in the distribution system under clause (A)(ii) has exceeded the chlorite MCL and the system has not been required to conduct monitoring under clause (B). The system may remain on the reduced monitoring schedule unless one (1) of the three (3) individual chlorite samples taken monthly in the distribution system under clause (A)(ii) exceeds the chlorite MCL or the system is required to conduct monitoring under clause (B), at which time the system shall revert to routine monitoring.

(3) Monitoring for bromate is as follows:

(A) CWSs and NTNCWSs using ozone for disinfection or oxidation shall take one (1) sample per month for each treatment plant in the system using ozone. Systems shall take samples monthly at the entrance to the distribution system while the ozonation system is operating under normal conditions.

(B) Systems required to analyze for bromate may reduce monitoring from monthly to once per quarter if the system demonstrates that the average source water bromide concentration is less than five-hundredths (0.05) milligram per liter based upon representative monthly bromide measurements for one (1) year. The system may remain on reduced bromate monitoring unless the running annual average source water bromide concentration, computed quarterly, is equal to or greater than five-hundredths (0.05) milligram per liter based upon representative monthly measurements. If the running annual average source water bromide concentration is equal to or greater than five-hundredths (0.05) milligram per liter, the system shall resume routine monitoring required by clause (A).

(c) Monitoring requirements for disinfectant residuals are as follows:

(1) Monitoring for chlorine and chloramines is as follows:

(A) CWSs and NTNCWSs that use chlorine or chloramines shall measure the residual disinfectant level in the distribution system **when at the same points and at the same time as** total coliforms are sampled, as specified in 327 IAC 8-2-8. Subpart H systems may use the results of residual disinfectant concentration

sampling conducted under 327 IAC 8-2-8.8(d) for systems ~~which~~ **that** filter in ~~lieu~~ **instead** of taking separate samples.

(B) Monitoring for chlorine or chloramines may not be reduced.

(2) Monitoring for chlorine dioxide is as follows:

(A) CWSs, NTNCWSs, and TWSs that use chlorine dioxide for disinfection or oxidation shall take daily samples at the entrance to the distribution system. For any daily sample that exceeds the MRDL, the system shall take samples in the distribution system the following day at the locations required by clause ~~(D)~~; **(B)** in addition to the sample required at the entrance to the distribution system.

(B) On each day following a routine sample monitoring result that exceeds the MRDL, the system is required to take three (3) chlorine dioxide distribution system samples.

(i) If chlorine dioxide or chloramines are used to maintain a disinfectant residual in the distribution system, or if chlorine is used to maintain a disinfectant residual in the distribution system and there are no disinfection addition points after the entrance to the distribution system, for example, no booster chlorination, the system shall take three (3) samples as close to the first customer as possible at intervals of at least six (6) hours.

(ii) If chlorine is used to maintain a disinfectant residual in the distribution system and there are one (1) or more disinfection addition points after the entrance to the distribution system, for example, booster chlorination, the system shall take one (1) sample at each of the following locations:

(AA) As close to the first customer as possible.

(BB) In a location representative of average residence time.

(CC) As close to the end of the distribution system as possible, reflecting maximum residence time in the distribution system.

(C) Chlorine dioxide monitoring may not be reduced.

(d) Monitoring requirements for disinfection byproduct precursors (DBPP) are as follows:

(1) Routine monitoring is required as follows:

(A) Subpart H systems ~~which~~ **that** use conventional filtration treatment, as defined in 327 IAC 8-2-1, shall monitor each treatment plant for TOC ~~no~~ **not** later than the point of combined filter effluent turbidity monitoring and representative of the treated water.

(B) All systems required to monitor under this subdivision shall also monitor for TOC in the source water ~~prior to~~ **before** any treatment at the same time as monitoring for TOC in the treated water. These samples, source water and treated water, are referred to as paired samples.

(C) At the same time as the source water sample is taken, all systems shall monitor for alkalinity in the source water ~~prior to~~ **before** any treatment.

(D) Systems shall take one (1) paired sample and one (1) source water alkalinity sample per month per plant at a time representative of normal operating conditions and influent water quality.

(2) Subpart H systems with an average treated water TOC of less than:

(A) two and zero-tenths (2.0) milligrams per liter for two (2) consecutive years; or ~~less than~~

(B) one (1.0) milligram per liter for one (1) year;

may reduce monitoring for both TOC and alkalinity to one (1) paired sample and one (1) source water alkalinity sample per plant per quarter. The system shall revert to routine monitoring in the month following the quarter when the annual average treated water TOC is greater than or equal to two and zero-tenths (2.0) milligrams per liter.

(e) Systems required to analyze for bromate may reduce bromate monitoring from monthly to once per quarter if the system demonstrates that the average source water bromide concentration is less than five-hundredths (0.05) milligram per liter based upon representative monthly measurements for one (1) year. The system shall continue bromide monitoring to remain on reduced bromate monitoring.

(f) Each system required to monitor under this section shall develop and implement a monitoring plan as follows:

(1) The system shall maintain the plan and make it available for inspection by the commissioner and the general public ~~no~~ **not** later than thirty (30) days following the applicable compliance dates in ~~section 4(b)~~ **and 4(c)** of this rule.

(2) All Subpart H systems serving more than three thousand three hundred (3,300) people shall submit a copy of the monitoring plan to the commissioner ~~no~~ **not** later than the date of the first report required under section 8 of this rule.

(3) The commissioner may also require any other system to submit a monitoring plan.

(4) After review, the commissioner may require changes in any plan elements.

(5) The plan must include, at a minimum, the following elements:

(A) Specific locations and schedules for collecting samples for any parameters included in this section.

(B) How the system will calculate compliance with MCLs, MRDLs, and treatment techniques.

(C) If:

(i) approved for monitoring as a consecutive system; or ~~if~~

(ii) providing water to a consecutive system;

the sampling plan must reflect the entire distribution system.

\*40 CFR 141.140 through ~~141.144~~ **40 CFR 141.144** is incorporated by reference and is available for copying at the Indiana Department of Environmental Management, Office of Water Quality, 100 North Senate Avenue, Room N1255, Indianapolis, Indiana 46204. (*Water Pollution Control Board; 327 IAC 8-2.5-6; filed May 1, 2003, 12:00 p.m.: 26 IR 2844; errata filed February 6, 2006, 11:15 a.m.: 29 IR 1937*)

SECTION 3. 327 IAC 8-2.5-7 IS AMENDED TO READ AS FOLLOWS:

**327 IAC 8-2.5-7 Compliance requirements; disinfectants and disinfection byproducts**

**Authority:** IC 13-13-5-1; IC 13-14-8-2; IC 13-14-8-7; IC 13-18-3-2

**Affected:** IC 13-12-3-1; IC 13-13-5-2; IC 13-14-9; IC 13-18-11

Sec. 7. (a) General compliance requirements for disinfectants and disinfection byproducts are as follows:

(1) Where compliance is based on a running annual average of monthly or quarterly samples or averages and the:

(A) system fails to monitor for TTHM, HAA5, or bromate, this failure to monitor will be treated as a monitoring violation for the entire period covered by the annual average; **and**

~~(2) Where compliance is based on a running annual average of monthly or quarterly samples or averages and the~~ (B) system's failure to monitor makes it impossible to determine compliance with MRDLs for chlorine and chloramines, this failure to monitor will be treated as a monitoring violation for the entire period covered by the annual average.

~~(3) (2)~~ All samples taken and analyzed under the provisions of this rule must be included in determining compliance, even if that number is greater than the minimum required.

~~(4) (3)~~ If, during the first year of monitoring under section 6 of this rule, any particular quarter's average will cause the running annual average of that system to exceed the MCL, the system is out of compliance at the end of that quarter.

(b) Compliance requirements for disinfection byproducts are as follows:

(1) Compliance requirements for TTHMs and HAA5 are as follows:

(A) For systems monitoring quarterly, compliance with MCLs in ~~section 1(b)~~ **section 2(a)** of this rule will be based on a running annual arithmetic average, computed quarterly, of quarterly arithmetic averages of all samples collected by the system as prescribed by section 6(b)(1) of this rule.

(B) For systems monitoring less frequently than quarterly, systems demonstrate MCL compliance if the average of samples taken that year under ~~the provisions of~~ section 6(b)(1) of this rule does not exceed the MCLs in ~~section 1~~ **section 2** of this rule. If the average of these samples exceeds the MCL, the system shall increase monitoring to once per quarter per treatment plant. Such a system is not in violation of the MCL until it has completed one (1) year of quarterly monitoring, unless the result of fewer than four (4) quarters of monitoring will cause the running annual average to exceed the MCL, in which case the system is in violation at the end of that quarter. Systems required to increase monitoring frequency to quarterly monitoring shall calculate compliance by including the sample that triggered the increased monitoring plus the following three (3) quarters of monitoring.

(C) If the running annual arithmetic average of quarterly averages covering any consecutive four (4) quarter period exceeds the MCL, the system:

(i) is in violation of the MCL; and

- (ii) must notify the public ~~pursuant to~~ **under** 327 IAC 8-2.1-7, in addition to reporting to the commissioner ~~pursuant to~~ **under** section 8 of this rule.
- (D) If a public water system fails to complete four (4) consecutive quarters of monitoring, compliance with the MCL for the last four (4) quarter compliance period must be based on an average of the available data.
- (2) Compliance requirements for bromate will be based on a running annual arithmetic average, computed quarterly, of:
  - (A) monthly samples; or
  - (B) for months in which the system takes more than one (1) sample, the average of all samples taken during the month; collected by the system as prescribed by section 6(b)(3) of this rule. If the average of samples covering any consecutive four (4) quarter period exceeds the MCL, the system is in violation of the MCL and shall notify the public ~~pursuant to~~ **under** 327 IAC 8-2.1-7, in addition to reporting to the agency ~~pursuant to~~ **under** section 8 of this rule. If a public water system fails to complete twelve (12) consecutive months of monitoring, compliance with the MCL for the last four (4) quarter compliance period must be based on an average of the available data.
- (3) Compliance requirements for chlorite will be based on an arithmetic average of each three (3) sample set taken in the distribution system as prescribed by section 6(b)(2)(A)(ii) and 6(b)(2)(B) of this rule. If the arithmetic average of any three (3) sample sets exceeds the MCL, the system:
  - (A) is in violation of the MCL; and
  - (B) shall notify the public ~~pursuant to~~ **under** 327 IAC 8-2.1-3 through 327 IAC 8-2.1-17, in addition to reporting to the commissioner ~~pursuant to~~ **under** section 8 of this rule.
- (c) Compliance requirements for disinfectant residuals are as follows:
  - (1) Compliance requirements for chlorine and chloramines are as follows:
    - (A) Compliance will be based on a running annual arithmetic average, computed quarterly, of monthly averages of all samples collected by the system under section 6(c)(1) of this rule. If the average covering any consecutive four (4) quarter period exceeds the MRDL, the system:
      - (i) is in violation of the MRDL; and
      - (ii) must notify the public ~~pursuant to~~ **under** 327 IAC 8-2.1-7, in addition to reporting to the commissioner ~~pursuant to~~ **under** section 8 of this rule.
    - (B) Where systems switch between the use of chlorine and chloramines for residual disinfection during the year, compliance must be determined by including all monitoring results of both chlorine and chloramines in calculating compliance. Reports submitted ~~pursuant to~~ **under** section 8 of this rule must clearly indicate which residual disinfectant was analyzed for each sample.
  - (2) Compliance requirements for chlorine dioxide are as follows:
    - (A) Compliance requirements for acute violations are as follows:
      - (i) Compliance will be based on consecutive daily samples collected by the system under section 6(c)(2) of this rule.

(ii) If any daily sample taken at the entrance to the distribution system exceeds the MRDL, and on the following day one (1) or more of the three (3) samples taken in the distribution system exceed the MRDL, the system is in violation of the MRDL and must:

(AA) take immediate corrective action to lower the level of chlorine dioxide below the MRDL; and ~~must~~

(BB) notify the public ~~pursuant to~~ **under** the procedures for acute health risks in 327 IAC 8-2.1-3 through 327 IAC 8-2.1-17.

(iii) Failure to take samples in the distribution system the day following an exceedance of the chlorine dioxide MRDL at the entrance to the distribution system will also be considered an MRDL violation, and the system shall notify the public of the violation in accordance with the provisions for acute violations under 327 IAC 8-2.1-7 through 327 IAC 8-2.1-17, in addition to reporting the commissioner ~~pursuant to~~ **under** section 8 of this rule.

(B) Compliance requirements for nonacute violations are as follows:

(i) Compliance will be based on consecutive daily samples collected by the system under section 6(c)(2) of this rule.

(ii) If any two (2) consecutive daily samples taken at the entrance to the distribution system exceed the MRDL and all distribution system samples taken are below the MRDL, the system is in violation of the MRDL and must take corrective action to lower the level of chlorine dioxide below the MRDL at the point of sampling and will notify the public ~~pursuant to~~ **under** the procedures for nonacute health risks in 327 IAC 8-2.1-7 through 327 IAC 8-2.1-17, in addition to reporting to the commissioner ~~pursuant to~~ **under** section 8 of this rule.

(iii) Failure to monitor at the entrance to the distribution system the day following an exceedance of the chlorine dioxide MRDL at the entrance to the distribution system is also an MRDL violation, and the system must notify the public of the violation in accordance with the provisions for nonacute violations under 327 IAC 8-2.1-7, in addition to reporting the commissioner ~~pursuant to~~ **under** section 8 of this rule.

(d) Compliance for disinfection byproduct precursors (DBPP) are as follows:

(1) Compliance will be determined as specified by section 9 of this rule.

(2) Systems may begin monitoring to determine whether Step 1 TOC removals can be met twelve (12) months ~~prior to~~ **before** the compliance date for the system. This monitoring is not required, and failure to monitor during this period is not a violation.

However, any system that:

(A) does not monitor during this period; and

(B) then determines in the first twelve (12) months after the compliance date that it is not able to meet the Step 1 requirements in section 9(b)(2) of this rule and must therefore apply for alternate minimum TOC removal (Step 2) requirements;

is not eligible for retroactive approval of alternate minimum TOC removal (Step 2) requirements as allowed by section 9(b)(3) of this rule and is in violation.

(3) Systems may apply for alternate minimum TOC removal (Step 2) requirements any time after the compliance date.

(4) For systems required to meet Step 1 TOC removals, if the value calculated under section 9(c)(1)(D) of this rule is less than one (1.00), the system:

(A) is in violation of the treatment technique requirements; and

(B) must notify the public ~~pursuant to 327 IAC 8-2.1-17(80)(a) and 327 IAC 8-2.1-17(80)(b)~~; **under 327 IAC 8-2.1-7 through 327 IAC 8-2.1-17**, in addition to reporting to the commissioner ~~pursuant to~~ **under** section 8 of this rule.

*(Water Pollution Control Board; 327 IAC 8-2.5-7; filed May 1, 2003, 12:00 p.m.: 26 IR 2847)*

#### SECTION 4. 327 IAC 8-2.5-8 IS AMENDED TO READ AS FOLLOWS:

### **327 IAC 8-2.5-8 Reporting and record keeping requirements; disinfectants and disinfection byproducts**

**Authority:** IC 13-13-5-1; IC 13-14-8-2; IC 13-14-8-7; IC 13-18-3-2

**Affected:** IC 13-12-3-1; IC 13-13-5-2; IC 13-14-9; IC 13-18-11

Sec. 8. (a) Systems required to sample:

(1) quarterly or more frequently shall report to the commissioner within ten (10) days after the end of each quarter in which samples were collected, notwithstanding the provisions of ~~327 IAC 8-2.1-7~~. **Systems required to sample 327 IAC 8-2-13; and**

(2) less frequently than quarterly report to the commissioner within ten (10) days after the end of each monitoring period in which samples were collected.

(b) For disinfection byproducts, systems must report the information specified in the following table:

IF YOU ARE A:	YOU MUST REPORT:
(1) System monitoring for TTHMs and HAA5 under the requirements of section 6(b) of this rule on a quarterly or more frequent basis:	(i) The number of samples taken during the last quarter. (ii) The location, date, and result of each sample taken during the last quarter. (iii) The arithmetic average of all samples taken in the last quarter. (iv) The annual arithmetic average of the quarterly arithmetic averages of this section for the last four (4) quarters. (v) Whether, based on section 7(b)(1) of this rule, the MCL was violated.
(2) System monitoring for TTHMs and HAA5 under the	(i) The number of samples taken during the last year. (ii) The location, date, and result of each sample taken during

requirements of section 6(b) of this rule less frequently than quarterly (but at least annually):	<p>the last monitoring period.</p> <p>(iii) The arithmetic average of all samples taken over the last year.</p> <p>(iv) Whether, based on section 7(b)(1) of this rule, the MCL was violated.</p>
(3) System monitoring for TTHMs and HAA5 under the requirements of section 6(b) of this rule less frequently than annually:	<p>(i) The location, date, and result of the last sample taken.</p> <p>(ii) Whether, based on section 7(b)(1) of this rule, the MCL was violated.</p>
(4) System monitoring for chlorite under the requirements of section 6(b) of this rule:	<p>(i) The number of entry point samples taken each month for the last three (3) months.</p> <p>(ii) The location, date, and result of each sample (both entry point and distribution system) taken during the last quarter.</p> <p>(iii) For each month in the reporting period, the arithmetic average of all samples taken in each three sample set taken in the distribution system.</p> <p>(iv) Whether, based on section 7(b)(3) of this rule, the MCL was violated, and in which month, and how many times it was violated each month.</p>
(5) System monitoring for bromate under the requirements of section 6(b) of this rule:	<p>(i) The number of samples taken during the last quarter.</p> <p>(ii) The location, date, and result of each sample taken during the last quarter.</p> <p>(iii) The arithmetic average of the monthly arithmetic averages of all samples taken in the last year.</p> <p>(iv) Whether, based on section 7(b)(2) of this rule, the MCL was violated.</p>

(c) For disinfectants, systems shall report the information specified in the following table:

IF YOU ARE A:	YOU MUST REPORT:
(1) System monitoring for chlorine or chloramines under the requirements of section 6(c) of this rule:	<p>(i) The number of samples taken during each month of the last quarter.</p> <p>(ii) The monthly arithmetic average of all samples taken in each month for the last twelve (12) months.</p> <p>(iii) The arithmetic average of all monthly averages for the last twelve (12) months.</p> <p>(iv) Whether, based on section 7(c)(1) of this rule, the MRDL was violated.</p>



(2) System monitoring for chlorine dioxide under the requirements of section 6(c) of this rule:	<p>(i) The dates, results, and locations of samples taken during the last quarter.</p> <p>(ii) Whether, based on section 7(c)(2) of this rule, the MRDL was violated.</p> <p>(iii) Whether the MRDL was exceeded in any two (2) consecutive daily samples and whether the resulting violation was acute or nonacute.</p>
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(d) For disinfection byproduct precursors and enhanced coagulation or enhanced softening, systems shall report the information specified in the following table:

IF YOU ARE A:	YOU MUST REPORT:
(1) System monitoring monthly or quarterly for TOC under the requirements of section 6(d) of this rule and required to meet the enhanced coagulation or enhanced softening requirements in section 9(b)(2) or 9(b)(3) of this rule:	<p>(i) The number of paired (source water and treated water) samples taken during the last quarter.</p> <p>(ii) The location, date, and results of each paired sample and associated alkalinity taken during the last quarter.</p> <p>(iii) For each month in the reporting period that paired samples were taken, the arithmetic average of the percent reduction of TOC for each paired sample and the required TOC percent removal.</p> <p>(iv) Calculations for determining compliance with the TOC percent removal requirements, as provided in section 9(c)(1) of this rule.</p> <p>(v) Whether the system is in compliance with the enhanced coagulation or enhanced softening percent removal requirements in section 9(b) of this rule for the last four (4) quarters.</p>
(2) System monitoring monthly or quarterly for TOC under the requirements of section 6(d) of this rule and meeting one (1) or more of the alternative compliance criteria in section 9(a)(2) or 9(a)(3) of this rule:	<p>(i) The alternative compliance criterion that the system is using.</p> <p>(ii) The number of paired samples taken during the last quarter.</p> <p>(iii) The location, date, and result of each paired sample and associated alkalinity taken during the last quarter.</p> <p>(iv) The running annual arithmetic average based on monthly averages (or quarterly samples) of source water TOC for systems meeting a criterion in section 9(a)(2)(A) or 9(a)(2)(C) of this rule or of treated water TOC for systems meeting the criterion in section 9(a)(2)(B) of this rule.</p> <p>(v) The running annual arithmetic average based on monthly averages (or quarterly samples) of source water SUVA for systems meeting the criterion in <del>section 9(a)(2)(G)</del> <b>section</b></p>

	<p><b>9(a)(2)(E)</b> of this rule or of treated water SUVA for systems meeting the criterion in <del>section 9(a)(2)(H)</del> <b>section 9(a)(2)(F)</b> of this rule.</p> <p>(vi) The running annual average of source water alkalinity for systems meeting the criterion in section 9(a)(2)(C) of this rule and of treated water alkalinity for systems meeting the criterion in section 9(a)(3)(A) of this rule.</p> <p>(vii) The running annual average for both TTHM and HAA5 for systems meeting the criterion in section 9(a)(2)(C) or <del>9(a)(2)(F)</del> <b>9(a)(2)(D)</b> of this rule.</p> <p>(viii) The running annual average of the amount of magnesium hardness removal (as CaCO<sub>3</sub>, in mg/L) for systems meeting the criterion in section 9(a)(3)(B) of this rule.</p> <p>(ix) Whether the system is in compliance with the particular alternative compliance criterion in section 9(a)(2) or 9(a)(3) of this rule.</p>
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*(Water Pollution Control Board; 327 IAC 8-2.5-8; filed May 1, 2003, 12:00 p.m.: 26 IR 2849)*

SECTION 5. 327 IAC 8-2.5-9 IS AMENDED TO READ AS FOLLOWS:

**327 IAC 8-2.5-9 Treatment techniques for control of disinfection byproducts precursors**

**Authority:** IC 13-13-5-1; IC 13-14-8-2; IC 13-14-8-7; IC 13-18-3-2

**Affected:** IC 13-12-3-1; IC 13-13-5-2; IC 13-14-9; IC 13-18-11

Sec. 9. (a) Applicability is as follows:

(1) Subpart H systems using conventional filtration treatment shall operate with enhanced coagulation or enhanced softening to achieve the TOC percent removal levels specified in subsection (b) unless the system meets at least one (1) of the alternative compliance criteria listed in subdivision (2) or (3).

(2) Subpart H systems using conventional filtration treatment may use one (1) or all of the following alternative compliance criteria to comply with this section ~~in lieu~~ **instead** of complying with subsection (b):

(A) The system's source water TOC level, measured according to section 5(d)(3) of this rule, is less than two and zero-tenths (2.0) milligrams per liter, calculated quarterly as a running annual average.

(B) The system's treated water TOC level, measured according to section 5(d)(3) of this rule, is less than two and zero-tenths (2.0) milligrams per liter, calculated quarterly as a running annual average.

(C) The system's source water TOC level, measured according to section 5(d)(3) of this rule, is less than four and zero-tenths (4.0) milligrams per liter, calculated quarterly as a running annual average and the following are met:

(i) The source water alkalinity, measured according to section 5(d)(1) of this rule, is greater than sixty (60) milligrams per liter (as  $\text{CaCO}_3$ ), calculated quarterly as a running annual average.

(ii) Either of the following:

(AA) The TTHM and HAA5 running annual averages are no greater than forty-thousandths (0.040) milligram per liter and thirty-thousandths (0.030) milligram per liter, respectively. ~~or~~

(BB) ~~Prior to~~ **Before** the effective date for compliance in section 4(b) of this rule, the system has made a clear and irrevocable financial commitment not later than the effective date for compliance in section 4(b) of this rule to use technologies that will limit the levels of TTHMs and HAA5 to ~~no~~ **not** more than forty-thousandths (0.040) milligram per liter and thirty-thousandths (0.030) milligram per liter, respectively. Systems shall submit evidence of a clear and irrevocable financial commitment, in addition to a schedule containing milestones and periodic progress reports for installation and operation of appropriate technologies, to the agency for approval not later than the effective date for compliance in section 4(b) of this rule. These technologies must be installed and operating not later than June 30, 2005.

(D) The TTHM and HAA5 running annual averages are ~~no~~ **not** greater than forty-thousandths (0.040) milligram per liter and thirty-thousandths (0.030) milligram per liter, respectively, and the system uses only chlorine for primary disinfection and maintenance of a residual in the distribution system.

(E) The system's source water SUVA, ~~prior to~~ **before** any treatment and measured monthly according to section 5(d)(4) of this rule, is less than or equal to two and zero-tenths (2.0) liters per milligram meter, calculated quarterly as a running annual average.

(F) The system's finished water SUVA, measured monthly according to section 5(d)(4) of this rule, is less than or equal to two and zero-tenths (2.0) liters per milligram meter, calculated quarterly as a running annual average.

(3) Systems practicing enhanced softening that cannot achieve the TOC removals required by ~~subdivision~~ **subsection** (b)(2) may use the following alternative compliance criteria ~~in lieu~~ **instead** of complying with subsection (b):

(A) Softening that results in lowering the treated water alkalinity to less than sixty (60) milligrams per liter (as  $\text{CaCO}_3$ ), measured monthly according to section 5(d)(1) of this rule and calculated quarterly as a running annual average.

(B) Softening that results in removing at least ten (10) milligrams per liter of magnesium hardness (as  $\text{CaCO}_3$ ), measured monthly and calculated quarterly as an annual running average.

Systems shall comply with monitoring requirements in section 6(d) of this rule.

(b) Enhanced coagulation and enhanced softening performance requirements are as follows:

(1) Systems shall achieve the percent reduction of TOC specified in subdivision (2) between the source water and the combined filter effluent unless the commissioner approves a system's request for alternate minimum TOC removal (Step 2) requirements under subdivision (3).

(2) Required Step 1 TOC reductions, indicated in the following table, are based upon specified source water parameters measured in accordance with section 6(d) of this rule. Systems practicing softening are required to meet the Step 1 TOC reductions in the far right column (source water alkalinity greater than one hundred twenty (120) milligrams per liter) for the specified source water TOC:

Step 1 Required Removal of TOC by Enhanced Coagulation and Enhanced Softening for Subpart H Systems Using Conventional Treatment<sup>1, 2</sup>

Source-Water TOC, mg/L	Source-Water Alkalinity, mg/L as CaCO <sub>3</sub>		
	0-60 (percent)	>60-120 (percent)	>120 <sup>3</sup> (percent)
>2.0-4.0	35.0%	25.0%	15.0%
>4.0-8.0	45.0%	35.0%	25.0%
>8.0	50.0%	40.0%	30.0%

<sup>1</sup>Systems meeting at least one (1) of the conditions in subsection (a)(2) are not required to operate with enhanced coagulation.

<sup>2</sup>Softening systems meeting one (1) of the alternative compliance criteria in subsection (a)(3) are not required to operate with enhanced softening.

<sup>3</sup>Systems practicing softening shall meet the TOC removal requirements in this column.

(3) Subpart H conventional treatment systems that cannot achieve the Step 1 TOC removals required by subdivision (2) due to water quality parameters or operational constraints shall apply to the commissioner, within three (3) months of failure to achieve the TOC removals required by subdivision (2), for approval of alternative minimum TOC (Step 2) removal requirements submitted by the system as provided by subdivision (4). If the commissioner approves the alternative minimum TOC removal (Step 2) requirements, the commissioner may make those requirements retroactive for the purposes of determining compliance. Until the commissioner approves the alternate minimum TOC

removal (Step 2) requirements, the system shall meet the Step 1 TOC removals contained in subdivision (2).

(4) Alternate minimum TOC removal (Step 2) requirements are as follows:

(A) Applications made to the commissioner by enhanced coagulation systems for approval of alternate minimum TOC removal (Step 2) requirements under subdivision (3) must include, at a minimum, results of bench-scale or pilot-scale testing conducted under clause (C). The submitted bench-scale or pilot-scale testing will be used to determine the alternate enhanced coagulation level.

(B) As used in this subdivision, “alternate enhanced coagulation level” means coagulation at a coagulant dose and pH as determined by the method described in ~~clauses~~ **clause (A), this clause, and clauses (C) through (E)** such that an incremental addition of ten (10) milligrams per liter of alum (or equivalent amount of ferric salt) results in a TOC removal of less than or equal to three-tenths (0.3) milligram per liter. The percent removal of TOC at this point on the TOC removal versus coagulant dose curve is defined as the minimum TOC removal required for the system. Once approved by the ~~agency~~, **commissioner**, this minimum requirement supersedes the minimum TOC removal required by the table in subdivision (2). This requirement will be effective until the ~~agency~~ **commissioner** approves a new value based on the results of a new bench-scale and pilot-scale tests. Failure to achieve alternative minimum TOC removal levels is a violation of ~~National Primary Drinking Water Regulations~~. **this subsection.**

(C) Bench-scale or pilot-scale testing of enhanced coagulation must be conducted by using representative water samples and adding ten (10) milligrams per liter increments of alum, or equivalent amounts of ferric salt, until the pH is reduced to a level less than or equal to the enhanced coagulation Step 2 target pH shown in the following table:

Enhanced Coagulation Step 2 Target pH	
Alkalinity (mg/L as CaCO <sub>3</sub> )	Target pH
0-60	5.5
>60-120	6.3
>120-240	7.0
>240	7.5

(D) For waters with alkalinities of less than sixty (60) milligrams per liter for which the addition of small amounts of alum or equivalent addition of iron coagulant drives the pH below five and five-tenths (5.5) before significant TOC removal occurs, the system shall add necessary chemicals to maintain the pH

between five and three-tenths (5.3) and five and seven-tenths (5.7) in samples until the TOC removal of three-tenths (0.3) milligram per liter per ten (10) milligrams per liter alum added, or ~~equivalent~~ **equivalent** addition of iron coagulant, is reached.

(E) The system may operate at any coagulant dose or pH necessary, consistent with ~~other National Primary Drinking Water Regulations, the provisions of 327 IAC 8-2, 327 IAC 8-2.5, and 327 IAC 8-2.6,~~ to achieve the minimum TOC percent removal approved under subdivision (3).

(F) If the TOC removal is consistently less than three-tenths (0.3) milligram per liter of TOC per ten (10) milligrams per liter of incremental alum dose at all dosages of alum (or ~~equivalent~~ **equivalent** addition of iron coagulant), the water is deemed to contain TOC not amenable to enhanced coagulation. The system may then apply to the commissioner for a waiver of enhanced coagulation requirements.

(c) Compliance calculations are required as follows:

(1) Subpart H systems other than those identified in subsection (a)(2) or (a)(3) shall comply with requirements contained in subsection (b)(2) or (b)(3). Systems shall calculate compliance quarterly, beginning after the system has collected twelve (12) months of data, by determining an annual average using the following method:

STEP 1: Calculate actual monthly TOC percent removal, which is equal to:

$(1 - (\text{treated water TOC} / \text{source water TOC})) \times \text{one hundred (100)}.$

STEP 2: Calculate the required monthly TOC percent removal (from either the table in subsection (b)(2) or from subsection (b)(3)).

STEP 3: Divide the value determined under STEP 1 by the value determined under STEP 2.

STEP 4: Add together the quotients determined under STEP 3 for the last twelve (12) months and divide by twelve (12).

STEP 5: If the quotient calculated in STEP 4 is less than one and zero-hundredths (1.00), the system is not in compliance with the TOC percent removal requirements.

(2) Systems may use the following provisions ~~in lieu~~ **instead** of the calculations in subdivision (1) to determine compliance with TOC percent removal requirements:

(A) In any month that the system's treated or source water TOC level, measured according to section 5(d)(3) of this rule, is less than two and zero-tenths (2.0) milligrams per liter, the system may assign a monthly value of one and zero-tenths (1.0) ~~(in lieu~~ **(instead** of the value calculated in STEP 3 of subdivision (1)) when calculating compliance under subdivision (1).

(B) In any month that a system practicing softening removes at least ten (10) milligrams per liter of magnesium hardness (as  $\text{CaCO}_3$ ), the system may assign a monthly value of one and zero-tenths (1.0) ~~(in lieu~~ **(instead** of the value calculated in STEP 3 of subdivision (1)) when calculating compliance under subdivision (1).

(C) In any month that the system's source water SUVA, ~~prior to~~ **before** any treatment and measured according to section 5(d)(4) of this rule, is less than or equal to two and zero-tenths (2.0) liters per milligram meter, the system may assign a monthly value of one and zero-tenths (1.0) ~~(in lieu of the value calculated in STEP 3 of subdivision (1))~~ **(instead of the value calculated in STEP 3 of subdivision (1))** when calculating compliance under subdivision (1).

(D) In any month that the system's finished water SUVA, measured according to section 5(d)(4) of this rule, is less than or equal to two and zero-tenths (2.0) liters per milligram meter, the system may assign a monthly value of one and zero-tenths (1.0) ~~(in lieu of the value calculated in STEP 3 of subdivision (1))~~ **(instead of the value calculated in STEP 3 of subdivision (1))** when calculating compliance under subdivision (1).

(E) In any month that a system practicing enhanced softening lowers alkalinity below sixty (60) milligrams per liter (as CaCO<sub>3</sub>), the system may assign a monthly value of one and zero-tenths (1.0) ~~(in lieu of the value calculated in STEP 3 of subdivision (1))~~ **(instead of the value calculated in STEP 3 of subdivision (1))** when calculating compliance under subdivision (1).

(3) Subpart H systems using conventional treatment may also comply with ~~the requirements of this section~~ by meeting the criteria in subsection (a)(2) or (a)(3).

(d) The commissioner identifies the following as treatment techniques for Subpart H systems **using conventional treatment** to control the level of disinfection byproduct precursors in drinking water treatment and distribution systems:

~~(1) Conventional treatment.~~

~~(2)~~ **(1)** Enhanced coagulation.

~~(3)~~ **(2)** Enhanced softening.

*(Water Pollution Control Board; 327 IAC 8-2.5-9; filed May 1, 2003, 12:00 p.m.: 26 IR 2851)*

SECTION 6. 327 IAC 8-2.6-6 IS AMENDED TO READ AS FOLLOWS:

### **327 IAC 8-2.6-6 Filter backwash**

**Authority:** IC 13-13-5-1; IC 13-14-8-2; IC 13-14-8-7; IC 13-18-3-2

**Affected:** IC 13-12-3-1; IC 13-13-5-2; IC 13-14-9; IC 13-18-11

Sec. 6. All subpart H systems that employ conventional filtration or direct filtration treatment and recycle spent filter backwash water, thickener supernatant, or liquids from dewatering processes shall meet the following requirements:

(1) A system shall notify the commissioner in writing by December 8, 2003, if the system recycles spent filter backwash water, thickener supernatant, or liquids from dewatering processes. This notification shall include, at a minimum, the following information:

(A) A plant schematic showing **the following**:

(i) The origin of all flows ~~which that~~ are recycled, including, but not limited to, spent filter backwash water, thickener supernatant, and liquids from dewatering processes.

- (ii) The hydraulic conveyance used to transport ~~the~~ **all flows that are recycled, including** spent filter backwash water, thickener supernatant, and liquids from dewatering processes. ~~and~~
    - (iii) The location where **all flows that are recycled, including** spent filter backwash water, thickener supernatant, and liquids from dewatering processes, are reintroduced back into the treatment plant.
  - (B) Typical recycle flow in gallons per minute.
  - (C) The highest observed plant flow experienced in the previous year in gallons per minute.
  - (D) Design flow for the treatment plant in gallons per minute.
  - (E) Commissioner-approved operating capacity for the plant where the commissioner has made such determinations.
- (2) Any system that recycles spent filter backwash water, thickener supernatant, or liquids from dewatering processes shall return these flows:
- (A) through the processes of a system's existing conventional or direct filtration system as defined in 327 IAC 8-2-1(14) and 327 IAC 8-2-1(18); or
  - (B) at an alternate location approved by the commissioner by June 8, 2004.
- If capital improvements are required to modify the recycle location to meet the requirement in this subdivision, all capital improvements shall be completed no later than June 8, 2006.
- (3) Subpart H systems shall collect and retain on file the following recycle flow information on forms provided by the department for review and evaluation by the commissioner beginning June 8, 2004:
- (A) ~~A~~ copy of the recycle notification and information submitted to the commissioner under subdivision (1)(B) through (1)(E).
  - (B) ~~A~~ list of all recycle flows and the frequency with which they are returned.
  - (C) ~~The~~ average and maximum:
    - (i) backwash flow rate through the filters; and ~~the average and maximum~~
    - (ii) duration of the filter backwash process in minutes.
  - (D) ~~The~~ typical filter run length and a written summary of how ~~the~~ filter run length is determined.
  - (E) The type of treatment provided for the recycle flow.
  - (F) Data on the **following**:
    - (i) ~~The~~ physical dimensions of the equalization and treatment units.
    - (ii) ~~The~~ typical and maximum hydraulic loading rates.
    - (iii) ~~The~~ type of treatment chemicals used and average dose and frequency of use. ~~and~~
    - (iv) ~~The~~ frequency at which solids are removed, if applicable.

*(Water Pollution Control Board; 327 IAC 8-2.6-6; filed May 1, 2003, 12:00 p.m.: 26 IR 2859)*

## SECTION 7. 327 IAC 8-11-1 IS AMENDED TO READ AS FOLLOWS:



**327 IAC 8-11-1 Water purification or treatment works; operation; reports**

**Authority: IC 13-14-8; IC 13-18-11-1.5; IC 13-18-11-13**

**Affected: IC 13-11-2; IC 13-18-11**

Sec. 1. (a) All purification or treatment works producing water to be used or available for drinking purposes by the public shall be properly and efficiently operated under the supervision of a competent operator or superintendent.

**(b) The commissioner may require the qualified operator or superintendent in responsible charge to attend training whenever, in the opinion of the commissioner, the training is deemed necessary for the protection of the public health.**

~~(b) Weekly~~ **(c) Monthly** reports of operation of ~~such water purification or treatment works shall~~ **the following system classification must** be submitted by the ~~owner or operator to the commissioner: such~~

**(1) WT2.**

**(2) WT3.**

**(3) WT4.**

**(4) WT5.**

**(5) Community public water systems purchasing water from WT4 or WT5 systems.**

**(6) Other systems determined by the commissioner to require monthly reporting.**

~~(d) Reports of operation shall~~ **required under subsection (c) must** be submitted on forms to be provided **or approved** by the commissioner and ~~shall must~~ include ~~such items of information as may be~~ **the following data, if applicable:**

**(1) Daily quantities of the following:**

**(A) Water treated.**

**(B) Water distributed.**

**(C) Chemicals added to the water.**

**(2) Daily operation of treatment processes, including backwashing of filters by amount of filter run time and total gallons of backwash.**

**(3) Results of the following:**

**(A) All chemical, physical, and other tests performed for plant control.**

**(B) Disinfectant residual in the distribution system where disinfection is provided.**

**(4) Totals and averages of the above measurements where spaces are provided on the report form.**

**(5) Other data found to be necessary by the commissioner.**

**(e) The commissioner may reduce or modify the reporting requirements for any of the items in subsection (d).**

**(f) All monthly reports of operation must be:**

**(1) submitted to the commissioner:**

**(A) within the first ten (10) days following the month for which the report is prepared; and**

**(B) using the methods specified in 327 IAC 8-2-13(e); and**

**(2) retained by the water systems for five (5) years.**

~~(c) The commissioner shall issue annually a certificate of qualification to each qualified operator or superintendent in responsible charge of producing or delivering a safe, potable drinking water and may request the same to attend short courses or schools, whenever in the opinion of the commissioner such training is deemed necessary for the protection of the public health. (Water Pollution Control Board; 327 IAC 8-11-1; filed Sep 24, 1987, 3:00 pm: 11 IR 718; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)~~

SECTION 8. 327 IAC 8-12-1 IS AMENDED TO READ AS FOLLOWS:

### **327 IAC 8-12-1 Definitions**

**Authority: IC 13-14-8; IC 13-18-11-1.5; IC 13-18-11-13**

**Affected: IC 13-11-2; IC 13-18-11**

Sec. 1. In addition to the definitions contained in IC 13-11-2 and 327 IAC 1, the following definitions apply throughout this rule:

(1) “Acceptable experience” means employment in the actual hands-on operation of a water treatment plant or water distribution system. Experience in:

~~(A) water w treatment plant maintenance; that directly relates to plant operation will be given a maximum of fifty percent (50%) credit for operational experience for those employed solely in this area. Experience in a or~~

~~(B) water treatment plant laboratory;~~

that directly relates to plant operation will also be given a maximum of fifty percent (50%) credit for operational experience for those employed solely in ~~this~~ **that respective** area. Acceptable experience shall be obtained under the ~~supervision~~ **oversight** of a certified operator, **as a certified operator**, or by otherwise demonstrating to the commissioner that the applicant’s experience meets the requirements described by this subdivision.

**(2) “Adequate supervision” means that sufficient time is spent at a water treatment plant or water distribution system on a regular basis to assure that the facility is operated and maintained in a manner that protects public health.**

~~(2)~~ **(3) “Applicant” means a person seeking certification as a water treatment plant or** water distribution system certified operator, whether or not the person is currently employed as an operator.

~~(3)~~ **(4) “Application” means a written request for certification under this rule addressed to the commissioner.**

~~(4)~~ **(5) “Automated monitoring” means a continuous monitoring system that will cause an alarm, dialer, or pager to notify a certified operator in cases where a water treatment plant or water distribution system may fail during periods of normal operation.**

~~(5)~~ **(6) “Available” means that, based on water treatment plant or water distribution system size, complexity, and source water quality, a certified operator must be on site or able to be contacted if needed to initiate appropriate action in a timely manner.**

~~(6)~~ (7) “Certificate” means an appropriate document **issued by the commissioner** containing the following information:

(A) Affirmation that the named person has fulfilled the requirements, including receiving a passing examination grade, necessary for the operation of the water treatment plant or water distribution system for which application was made.

(B) The water treatment plant or water distribution system classification that may be operated under the issued certificate.

(C) The date of issuance.

(D) An identification number unique to each certificate document.

~~(7)~~ (8) “Certification card” means a card issued **by the commissioner** to a person who has fulfilled the requirements to be a water treatment plant or **water** distribution system certified operator and ~~contains~~ **containing** the following information:

(A) The name and certificate number of the person.

(B) The classification of the water treatment plant or **water** distribution system that the named person may operate.

(C) An expiration date.

~~(8)~~ (9) “Certified operator” means a person who has:

(A) met the requirements of this rule;

(B) a valid certificate in a classification identified in section 2 of this rule for water treatment **plant** or water distribution **system** operation; and

(C) the ability to make decisions regarding the daily operational activities of a public water system water treatment plant or water distribution system that will directly impact the quality or quantity of the drinking water.

~~(9)~~ (10) “Certified operator in responsible charge” means a person designated by the owner or governing body of a water treatment plant or water distribution system to be the certified operator who:

(A) has complete responsibility for the proper operation of a water treatment plant or water distribution system; and

(B) makes decisions regarding the daily operational activities of a public water system treatment plant or distribution system that will directly impact the quality or quantity of drinking water from community public water supply systems and nontransient noncommunity public water supply systems.

~~(10)~~ (11) “Commissioner” means the commissioner of the department of environmental management.

~~(11)~~ (12) “Contact hour” means a fifty (50) to sixty (60) minute instructional session involving an instructor or lecturer approved by the commissioner. Ten (10) contact hours equals one (1) continuing education unit (CEU) as defined by the National Task Force on the Continuing Education Unit.

(13) “Daily visit” means the time that:

(A) a certified operator in responsible charge; or

(B) another properly certified operator under the direction of the operator in responsible charge;

**is present on site at the facility of responsibility during a twenty-four (24) hour period.**

~~(12)~~ **(14)** “Operating shift” means that period of time during which operator decisions that affect public health are necessary for the proper operation of the system.

~~(13)~~ **(15)** “Plant operation” means the time of:

(A) actual production; or

(B) pumping to produce drinking water supply.

~~(14)~~ **(16)** “Population served” means the currently accepted population equivalent.

~~(15)~~ **(17)** “Training provider” means a person who conducts or presents a course training session approved under section 7.1 of this rule.

*(Water Pollution Control Board; 327 IAC 8-12-1; filed Sep 24, 1987, 3:00 p.m.: 11 IR 719; filed Sep 19, 1990, 3:00 p.m.: 14 IR 259; filed Dec 12, 1994, 4:39 p.m.: 18 IR 1230; filed Nov 20, 2000, 4:11 p.m.: 24 IR 973)*

SECTION 9. 327 IAC 8-12-2 IS AMENDED TO READ AS FOLLOWS:

**327 IAC 8-12-2 Classification of water distribution systems and water treatment plants**

**Authority: IC 13-14-8; IC 13-18-11-1.5; IC 13-18-11-13**

**Affected: IC 13-18-11**

Sec. 2. (a) A water distribution system shall be classified in one (1) of three (3) classifications as follows:

(1) Class DSS (distribution system small) includes systems that:

(A) serve a population of less than three thousand three hundred ~~(3,300); one (3,301);~~ and

(B) have no components other than:

(i) pressure tanks; or

(ii) storage tanks.

**Nontransient noncommunity public water systems serving a population less than five hundred one (501) utilizing no treatment other than ion exchange or inline filtration are DSS systems.**

(2) Class DSM (distribution system medium) includes systems that meet one (1) of the following:

(A) Serve a population greater than ~~or equal to~~ three thousand three hundred ~~one (3,301)~~ **(3,300)** but less than ~~or equal to~~ ten thousand ~~(10,000)~~ **one (10,001)**

people and have no mechanical means of movement of water other than one (1) of the following:

(i) Pressure tanks.

(ii) Storage tanks.

**(iii) Booster pumps to storage tanks.**

(B) **Serve a population of less than three thousand three hundred one (3,301) and consist of at least one (1) of the following:**

- ~~(i) Pump.~~
  - (i) Pumps, not including well pumps, before the entry point to the distribution system.**
  - ~~(ii) Storage tanks.~~
  - (iii) (ii) Booster pumps to storage tanks.**
- (3) Class DSL (distribution system large) includes systems that meet one (1) of the following:
- (A) Serve a population greater than ~~or equal to~~ ten thousand ~~one (10,001)~~ **(10,000)** people.
  - (B) Serve a population of less than ten thousand one (10,001) and consist of at least one (1) of the following:**
    - ~~(i) Storage tanks.~~
    - ~~(ii) (i) Booster pumps to in the distribution system other than booster pumps to storage tanks.~~
    - ~~(iii) (ii) Mechanical devices for movement of water beyond storage.~~
- (b) A water treatment plant shall be classified in one (1) of six (6) classifications, based on population served and type of treatment, as follows:
- (1) Class WT 1 includes systems that meet the following:
- (A) Serve a population less than ~~or equal to~~ five hundred ~~(500)~~ **one (501)** people.
  - (B) Are a community water system.**
  - ~~(B) (C)~~ **(C)** Acquire water from one (1) **or both** of the following:
    - (i) Ground water.
    - (ii) Purchase.
  - ~~(C) (D)~~ **(D)** Have one (1) **or both** of the following:
    - (i) Ion exchange softening process for cation removal.
    - (ii) Inline filtration device with no chemical treatment.
- (2) Class WT 2 includes, ~~systems~~ with no population limitations, **systems** that meet the following: **requirements of clause (A) and either clause (B) or (C), or both, as follows:**
- (A) Acquire water from one (1) **or more** of the following:
    - (i) Ground water.
    - (ii) Purchase.
  - (B) Utilize chemical feed to achieve one (1) of the following:
    - (i) Disinfection.
    - (ii) Fluoride standardization.
    - (iii) Water stabilization.
  - (C) Have one (1) or both of the following:**
    - (i) An ion exchange softening process for cation removal if the population served is greater than five hundred (500) and less than three thousand three hundred one (3,301).**

- (ii) **An inline filtration device if the population served is greater than five hundred (501) and less than three thousand three hundred one (3,301).**
- (3) Class WT 3 includes systems that meet the following:
  - (A) Acquire water from one (1) **or both** of the following:
    - (i) Ground water.
    - (ii) Purchase.
  - (B) Utilize chemical feed.
  - (C) Have one (1) **or more** of the following:
    - (i) Pressure or gravity filtration.
    - (ii) Ion exchange processes if the population served is greater than ~~five~~ **three thousand three hundred one (3,300).**
    - (iii) Lime soda softening.
    - (iv) Reverse osmosis.
    - (v) **Inline filtration if the population served is greater than three thousand three hundred (3,300).**
- (4) Class WT 4 includes systems that meet the following:
  - (A) Serve a population less than ~~or equal to~~ ten thousand ~~(10,000)~~ **one (10,001)** people.
  - (B) Acquire water from one (1) **or both** of the following:
    - (i) Surface water.
    - (ii) Ground water under the direct influence of surface water.
- (5) Class WT 5 includes systems that meet the following:
  - (A) Serve a population greater than ten thousand ~~one (10,001)~~ **(10,000)** people.
  - (B) Acquire water from one (1) **or both** of the following:
    - (i) Surface water.
    - (ii) Ground water under the direct influence of surface water.
- (6) Class WT 6 includes systems that utilize newly emerging treatment technology not commonly in use for drinking water treatment in Indiana, as determined by the commissioner.
- (7) The commissioner may determine the classification of a system based on system complexity and operational requirements where necessary.**

*(Water Pollution Control Board; 327 IAC 8-12-2; filed Sep 24, 1987, 3:00 p.m.: 11 IR 719; filed Sep 19, 1990, 3:00 p.m.: 14 IR 259; filed Dec 12, 1994, 4:39 p.m.: 18 IR 1230; errata filed Mar 9, 1995, 4:15 p.m.: 18 IR 1836; filed Nov 20, 2000, 4:11 p.m.: 24 IR 974)*

SECTION 10. 327 IAC 8-12-3 IS AMENDED TO READ AS FOLLOWS:

### **327 IAC 8-12-3 Qualifications of a certified operator**

**Authority:** IC 13-14-8; IC 13-18-11-1.5; IC 13-18-11-13

**Affected:** IC 13-11-2; IC 13-18-11

Sec. 3. (a) In order to become a certified operator of a water treatment plant or a water distribution system, a person must **do the following**:

(1) Meet the minimum qualifications specified in subsection (b). ~~and~~

(2) Pass the certification examination required by the commissioner unless exempted by statute or rule.

(b) ~~Prior to~~ **Before** applying to take the water treatment plant or water distribution system operator certification examination given by the commissioner, a person must have the following qualifications:

(1) The educational skills necessary to **do the following**:

(A) Make simple computations:

(i) with fractions and decimals; **and**

(ii) **of multiplication and division.**

(B) Read a linear scale.

(C) Calculate volumes of simple shapes.

~~(D) make simple computations of multiplication and division;~~

~~(E)~~ (D) Keep records.

~~(F)~~ (E) Read and write the English language to the extent of:

(i) interpreting service manuals and work orders; and

(ii) submitting written reports.

~~(G)~~ (F) Understand basic principles of **the following**:

(i) Sanitation. ~~and~~

~~(H) understand basic principles of~~ (ii) Science.

(2) With the exception of an operator-in-training, experience acceptable to the commissioner in the field of water treatment or water distribution that **meets the following requirements**:

(A) Demonstrates the examination applicant's technical knowledge.

(B) Can be verified based on information from available sources, primarily the applicant's water treatment plant or water distribution system employer. ~~and~~

(C) Is the result of satisfactory accomplishment of work in accordance with the following:

(i) Measured from the date of employment of the applicant to the date of the next scheduled examination.

(ii) Received under the ~~supervision~~ **oversight** of a certified operator qualified to operate the same classification of **water** treatment plant or **water** distribution system as that of the applicant's certification application **except where one (1) of the following is used to meet the requirements for acceptable work experience**:

(AA) 327 IAC 8-12-3.2(b)(2)(C)(ii).

(BB) 327 IAC 8-12-3.2(b)(3)(D)(ii).

(CC) 327 IAC 8-12-3.2(b)(3)(D)(iii).

(DD) 327 IAC 8-12-3.2(b)(3)(D)(iv).

(EE) 327 IAC 8-12-3.2(c)(2)(D)(ii).

- (FF) 327 IAC 8-12-3.2(c)(4)(D)(iii).
- (GG) 327 IAC 8-12-3.2(c)(5)(D)(i)(BB).
- (HH) 327 IAC 8-12-3.2(c)(5)(D)(iii).
- (II) 327 IAC 8-12-3.4.
- (JJ) 327 IAC 8-12-3.5.

**Where acceptable work experience is gained under these provisions, oversight may be under an operator qualified to operate the water treatment plant or water distribution system where the experience was obtained. If the applicant holds a certification license for the classification of system where the experience is obtained, the applicant's manager may certify that the experience has been obtained.**

*(Water Pollution Control Board; 327 IAC 8-12-3; filed Sep 24, 1987, 3:00 p.m.: 11 IR 721; filed Sep 19, 1990, 3:00 p.m.: 14 IR 262; filed Dec 12, 1994, 4:39 p.m.: 18 IR 1232; errata filed Mar 9, 1995, 4:15 p.m.: 18 IR 1836; filed Nov 20, 2000, 4:11 p.m.: 24 IR 977)*

SECTION 11. 327 IAC 8-12-3.2 IS AMENDED TO READ AS FOLLOWS:

### **327 IAC 8-12-3.2 Certified operator grades**

**Authority: IC 13-14-8; IC 13-18-11-1.5; IC 13-18-11-13**

**Affected: IC 13-18-11**

Sec. 3.2. (a) Grade operator-in-training (O.I.T.) is available under the following guidelines:

- (1) To a person meeting the following:
  - (A) Currently employed at a public water system with facilities classified as a Class WT 3, ~~Class~~ WT 4, or ~~Class~~ WT 5 water treatment plant or a **Class** DSL water distribution system.
  - (B) Has fulfilled the qualifications of section 3(a)(2) and 3(b)(1) of this rule.
- (2) In accordance with the following:
  - (A) Until the O.I.T. meets the experience requirement needed for the classification of treatment plant or distribution system where the O.I.T. is accumulating work experience.
  - (B) Operating work must be accomplished under the supervision of a certified operator in responsible charge who must verify to the commissioner the satisfactory achievement of acceptable experience by the O.I.T.
  - (C) An O.I.T. may not **do any of the following**:
    - (i) Serve as a certified operator in responsible charge.
    - (ii) Transfer an O.I.T. certification to a water treatment plant or **water** distribution system with a public water system identification number (PWSID) different than the PWSID for which the certification was issued.



- (iii) Hold two (2) **water** treatment plant or **water** distribution system O.I.T. certifications concurrently. ~~or~~
- (iv) Renew the O.I.T. certification.

(b) A water distribution system certified operator may possess a valid certification in one (1) or more of the following three (3) grades:

(1) Grade DSS is a certified operator qualified to operate a Class DSS water distribution system after having fulfilled the following requirements:

- (A) Possess a high school diploma or its equivalent.
- (B) Meet the qualifications of section 3 of this rule.
- (C) Attain a minimum of one (1) year of acceptable work experience in the operation of a Class DSS water distribution system.

(2) Grade DSM is a certified operator qualified to operate a Class DSS and Class DSM water distribution system after having fulfilled the following requirements:

- (A) Possess a high school diploma or its equivalent.
- (B) Meet the qualifications of section 3 of this rule.
- (C) Attain one (1) of the following acceptable work experience requirements:
  - (i) One (1) year in the operation of a Class DSM water distribution system.
  - (ii) Two (2) years in the operation of a Class DSS water distribution system.

(3) Grade DSL is a certified operator qualified to operate a Class DSS, Class DSM, and Class DSL water distribution system after having fulfilled the following requirements:

- (A) Possess a high school diploma or its equivalent.
- (B) Meet the qualifications of section 3 of this rule.
- (C) Must be able to **do the following**:
  - (i) Maintain inventories.
  - (ii) Order supplies and equipment. ~~and~~
  - (iii) Interpret chemical and bacteriological sample reports.
- (D) Attain one (1) of the following acceptable work experience requirements:
  - (i) One (1) year in the operation of a Class DSL water distribution system.
  - (ii) Three (3) years in the operation of a Class DSM water distribution system.
  - (iii) Five (5) years in the operation of a Class DSS water distribution system.
  - (iv) An acceptable number of years of experience approved by the commissioner if gained in operation of a combination of the various classifications of water distribution systems.

(c) A water treatment plant certified operator may possess a valid certification in one (1) or more of the following ~~five (5)~~ **six (6)** grades:

(1) Grade WT 1 is a certified operator qualified to operate a Class WT 1 water treatment plant **or a Class DSS water distribution system at a nontransient noncommunity**

**water system serving five hundred (500) or fewer individuals or a community water system serving one hundred (100) or fewer individuals** after having fulfilled the following requirements:

(A) Possess a high school diploma or its equivalent.

(B) Meet the qualifications of section 3 of this rule.

(C) Must be able to **do the following**:

(i) Maintain inventories.

(ii) Order supplies and equipment. ~~and~~

(iii) Interpret chemical and bacteriological sample reports.

(D) Attain a minimum of one (1) year of acceptable work experience in the operation of a Class WT 1 water treatment plant.

(2) Grade WT 2 is a certified operator qualified to operate a Class WT 1 and a Class WT 2 water treatment plant **and a Class DSS water distribution system at a nontransient noncommunity water system serving five hundred (500) or fewer individuals or a community water system serving one hundred (100) or fewer individuals** after having fulfilled the following requirements:

(A) Possess a high school diploma or its equivalent.

(B) Meet the qualifications of section 3 of this rule.

(C) Must be able to **do the following**:

(i) Maintain inventories.

(ii) Order supplies and equipment. ~~and~~

(iii) Interpret chemical and bacteriological sample reports.

(D) Attain one (1) of the following acceptable work experience requirements:

(i) One (1) year in the operation of a Class WT 2 water treatment plant.

(ii) Two (2) years in the operation of a Class WT 1 water treatment plant.

(3) Grade WT 3 is a certified operator qualified to operate a Class WT 1, Class WT 2, and Class WT 3 water treatment plant **and a Class DSS water distribution system at a nontransient noncommunity water system serving five hundred (500) or fewer individuals or a community water system serving one hundred (100) or fewer individuals** after having fulfilled the following requirements:

(A) Possess a high school diploma or its equivalent.

(B) Meet the qualifications of section 3 of this rule.

(C) Must be able to **do the following**:

(i) Maintain inventories.

(ii) Order supplies and equipment. ~~and~~

(iii) Interpret chemical and bacteriological sample reports.

(D) Attain the following acceptable work experience at a minimum:

(i) Two (2) years in the operation of a Class WT 3 water treatment plant.

(ii) Successful completion of educational work at college level in:

(AA) engineering;

(BB) chemistry; or

(CC) science;

related to water treatment may be substituted for work experience required according to item (i) at the ratio of four (4) semesters or six (6) quarters of schooling for a maximum substitution of one (1) year of experience.

(4) Grade WT 4 is a certified operator qualified to operate a Class WT 1, Class WT 2, and Class WT 4 water treatment plant **and a Class DSS water distribution system at a nontransient noncommunity water system serving five hundred (500) or fewer individuals or a community water system serving one hundred (100) or fewer individuals** after having fulfilled the following requirements:

- (A) Possess a high school diploma or its equivalent.
- (B) Meet the qualifications of section 3 of this rule.
- (C) Must be able to **do the following**:
  - (i) Maintain inventories.
  - (ii) Order supplies and equipment. ~~and~~
  - (iii) Interpret chemical and bacteriological sample reports.
- (D) Attain the following acceptable work experience at a minimum:
  - (i) Two (2) years in the operation of a Class WT 4 water treatment plant.
  - (ii) Successful completion of educational work at college level in:
    - (AA) engineering;
    - (BB) chemistry; or
    - (CC) science;

related to water treatment may be substituted for work experience required according to item (i) at the ratio of four (4) semesters or six (6) quarters of schooling for a maximum substitution of one (1) year of experience.

(iii) Two (2) years in the operation of a Class WT 3 water treatment plant may substitute for a maximum of one (1) year of experience required according to item (i).

(5) Grade WT 5 is a certified operator qualified to operate a Class WT 1, Class WT 2, Class WT 4, and Class WT 5 water treatment plant **and a Class DSS water distribution system at a nontransient noncommunity water system serving five hundred (500) or fewer individuals or a community water system serving one hundred (100) or fewer individuals** after having fulfilled the following requirements:

- (A) Possess a high school diploma or its equivalent.
- (B) Meet the qualifications of section 3 of this rule.
- (C) Must have the ability to **do the following**:
  - (i) Use conversion factors.
  - (ii) Solve simple mathematical equations.
  - (iii) Understand **the following**:
    - (AA) Simple chemical laboratory equipment.
    - ~~(iv) understand~~ (BB) The bacteriological procedures used in water supply work.
  - ~~(v)~~ (iv) Maintain inventories. ~~and~~
  - ~~(vi)~~ (v) Order supplies and equipment.

(D) Attain the following acceptable work experience at a minimum:

(i) One (1) of the following:

(AA) Three (3) years in the operation of a Class WT 5 water treatment plant.

(BB) Five (5) years in the operation of a Class WT 4 water treatment plant.

(ii) Successful completion of educational work at college level in:

(AA) engineering;

(BB) chemistry; or

(CC) science;

related to water treatment may be substituted for work experience required according to item (i) at the ratio of four (4) semesters or six (6) quarters of schooling for one (1) year of experience, up to a maximum of two (2) years of experience.

(iii) Two (2) years in the operation of a WT 3 water treatment plant may be substituted for one (1) year of experience required according to item (i) up to a maximum substitution of two (2) years experience.

(6) Grade WT 6 is a certified operator qualified to operate a Class WT 6 water treatment plant that requires operator qualifications determined by the commissioner on an individual plant basis in response to the specialized nature of the water treatment plant.

(d) An applicant for water treatment plant or water distribution system operator certification may submit proof to the commissioner to demonstrate the achievement of an equivalent level of acceptable **training or** work experience for that required by the following subsections:

(1) (b)(1)(C).

(2) (b)(2)(C).

(3) (b)(3)(D).

(4) (c)(1)(D).

(5) (c)(2)(D).

(6) (c)(3)(D).

(7) (c)(4)(D).

(8) (c)(5)(D).

(e) A Grade WT 3, Grade WT 4, and Grade WT 5 operator is qualified to apply for the appropriate wastewater treatment **plant** certification according to 327 IAC 5-22 to treat wastewater from a water treatment plant provided the operator is certified to operate that classification of water treatment plant. (*Water Pollution Control Board; 327 IAC 8-12-3.2; filed Nov 20, 2000, 4:11 p.m.: 24 IR 980*)

SECTION 12. 327 IAC 8-12-3.4 IS AMENDED TO READ AS FOLLOWS:

### **327 IAC 8-12-3.4 Grandparenting**

**Authority: IC 13-14-8; IC 13-18-11-1.5; IC 13-18-11-10.5; IC 13-18-11-13**

**Affected: IC 13-18-11**

Sec. 3.4. (a) For ~~the~~ purposes of this rule, grandparenting is the process through which the commissioner may issue operator certification to a person who has been working at a water treatment plant or water distribution system that, ~~prior to~~ **before** the effective date of this rule, was not required to be under the supervision of a certified operator. An operator certificate to be conferred through grandparenting may be issued if:

- (1) the owner or governing body meets the criterion of subsection (b); and
- (2) the recipient of ~~such the~~ certificate ~~must abide~~ **abides** by the requirements of subsection (d).

(b) The commissioner may issue an operator certification in the operator grade appropriate to the classification of water treatment plant or water distribution system where the recipient has been an employee acting in the capacity of an operator making process control decisions that affect the quality or quantity of water from the treatment plant or distribution system if the owner or governing body submits an application to the commissioner before September 1, 2002, requesting certification of each person intended to be designated as one (1) of the facility's operators in responsible charge.

(c) A certification conferred under grandparenting shall be **as follows**:

(1) Valid only at the site where the person receiving the grandparent certification gained operator experience.

(2) Valid for three (3) years during which time the operator must **do the following**:

(A) Fulfill the continuing education requirements for the grade of operator certification that has been conferred through grandparenting as listed in section 7.5 of this rule in order to be eligible for certification renewal according to section 7(e)(3) of this rule. ~~and~~

(B) Successfully complete an operator training course specified by the commissioner. ~~and~~

(3) Invalid if the classification of the water treatment plant or water distribution system changes to one (1) requiring a certified operator with more extensive education or experience qualifications, such as may be based on **any of the following**:

(A) Increased capacity.

(B) An increase in population served.

(C) A basic change in the method of water treatment. ~~or~~

(D) Another change in conditions that causes a more difficult or complex operation.

**(4) The commissioner may allow a grandparented operator to continue operation of a system where the classification has changed under subdivision (3) if the operator demonstrates to the commissioner that the facility will be properly operated. For a grandparented operator to continue operation of a system where the classification has changed under subdivision (3), a written request must be made by the owner of the public water system.**

(d) If an operator certified under grandparenting according to this section:

(1) fails to meet the continuing education requirements of section 7.5 of this rule within

the required time according to subsection (c)(2); or  
(2) goes to work at water treatment plant or water distribution system other than the one for which the grandparent certification was conferred;  
then the grandparent certification is voided and the operator must become certified according to the requirements of this rule. (*Water Pollution Control Board; 327 IAC 8-12-3.4; filed Nov 20, 2000, 4:11 p.m.: 24 IR 982*)

SECTION 13. 327 IAC 8-12-3.5 IS ADDED TO READ AS FOLLOWS:

**327 IAC 8-12-3.5 Site-specific operator**

**Authority: IC 13-14-8; IC 13-18-11-1.5; IC 13-18-11-13**

**Affected: IC 13-18-11**

**Sec. 3.5. (a) Operators of nontransient noncommunity public water systems of the following facility classifications may be granted SSO certifications:**

**(1) Class DSS systems.**

**(2) Class WT1 systems.**

**(3) Noncommunity public water systems of other facility classifications may be granted SSO certifications for their classifications if the commissioner determines that the SSO applicant will adequately perform the tasks necessary for proper operation of the system.**

**(b) Operators of community public water systems serving one hundred (100) or fewer people with the following facility classifications may be granted SSO certifications:**

**(1) Class DSS systems.**

**(2) Class WT1 systems.**

**(c) The following requirements must be met in order for a site specific operator (SSO) certification to be granted for a public water system:**

**(1) The owner of the system shall designate a person to be in responsible charge of the system.**

**(2) The designee (applicant) must be an employee or member of the public water system.**

**(3) Each applicant shall do the following:**

**(A) Demonstrate proficiency to the commissioner in accordance with section 4.5 of this rule.**

**(B) Meet the requirements of section 3(b)(1) of this rule.**

**(C) Be able to do the following:**

**(i) Maintain inventories.**

**(ii) Order supplies.**

**(iii) Interpret chemical and bacteriological sample reports.**

**(4) A person may hold only one (1) SSO certification at a time unless the commissioner has determined that the SSO operator can maintain each system for which an SSO certification is requested.**

(d) An SSO certification is valid as follows:

(1) Only at the site for which the SSO certification is granted.

(2) For three (3) years, during which time the operator shall fulfill the continuing education requirements for the SSO certification as listed in section 7.5 of this rule in order to be eligible for certification renewal in accordance with section 7(e)(3) of this rule.

(e) An SSO certification will be invalid if the classification of water treatment plant or water distribution system changes to one (1) requiring a certified operator with more extensive education or experience, such as any of the following:

(1) Increased capacity.

(2) An increase in population served.

(3) A basic change in the method of water treatment.

(4) Another change in conditions that causes a more difficult or complex operation.

(f) If a person granted an SSO certification fails to meet the continuing education requirements of section 7.5 of this rule within the required time set forth in subsection (d)(2), then:

(1) the SSO certification is voided; and

(2) the operator must become certified according to the requirements of this rule.

(g) The commissioner may revoke an SSO certification due to failure to do any of the following:

(1) Conduct any of the following:

(A) Monitoring and reporting to meet the requirements of 327 IAC 8-2.

(B) Reporting to meet the requirements of 327 IAC 8-2.1.

(C) Monitoring and reporting to meet the requirements of 327 IAC 8-2.5.

(2) Operate and maintain the system in a manner that protects human health.

*(Water Pollution Control Board; 327 IAC 8-12-3.5)*

SECTION 14. 327 IAC 8-12-3.6 IS AMENDED TO READ AS FOLLOWS:

### **327 IAC 8-12-3.6 Certified operator in responsible charge**

**Authority:** IC 13-14-8; IC 13-18-11-1.5; IC 13-18-11-13

**Affected:** IC 13-18-11

Sec. 3.6. (a) A certified operator may be in responsible charge of more than one (1) water treatment plant or water distribution system if the following conditions are met:

(1) The certified operator will be able to provide adequate supervision to all units involved.

(2) ~~Prior to~~ **Before** undertaking multiple operator positions of responsible charge, a letter signed by the certified operator is submitted to the owner or governing body of each water treatment plant and water distribution system to be under the responsible charge of the certified operator providing the following information:

(A) The name and location of ~~each~~ each water treatment plant and water

distribution system to be under the responsible charge of the certified operator.

(B) The number of hours per week the certified operator shall work at each water treatment plant and water distribution system.

(b) ~~As used in this section, “adequate supervision” means that sufficient time is spent at a water treatment plant or water distribution system on a regular basis to assure that the certified operator is knowledgeable of the actual operations and that test reports and results are representative of the actual operational conditions. A daily visit is the time that a certified operator is present on site at the facility of responsibility during a twenty-four (24) hour period; a certified operator shall be credited for no more than one (1) daily visit within a twenty-four (24) hour period.~~ The following establishes minimum criteria regarding adequate supervision at each classification of water distribution system and water treatment plant:

(1) DSS must **do the following:**

(A) Be monitored daily by a dependable person or automated system. ~~and~~

(B) **Meet the following conditions based on system size and type:**

(i) **A community water system must have a certified operator on site for a minimum of two (2) daily visits every week.**

(ii) **A nontransient noncommunity water system serving greater than five hundred (500) individuals must have a certified operator on site for a minimum of one (1) daily visit every week.**

(iii) **A nontransient noncommunity water system serving five hundred (500) or fewer individuals must have a certified operator on site for a minimum of one (1) daily site visit every two (2) weeks.**

(2) DSM must **do the following:**

(A) Be monitored daily by a dependable person or automated system. ~~and~~

(B) Have a certified operator on site for a minimum of three (3) daily visits every week.

(3) DSL must **do the following:**

(A) Be monitored daily by a dependable person or automated system. ~~and~~

(B) Have a certified operator on site for a minimum of five (5) daily visits every week.

(4) WT 1 must **do the following:**

(A) Be monitored daily by a dependable person or automated system. ~~and~~

(B) Have a certified operator on site for a minimum of three (3) daily visits every week.

(5) WT 2 must **do the following:**

(A) Be monitored daily by a dependable person or automated system. ~~and~~

(B) Have a certified operator on site for a minimum of five (5) daily visits every week.

(6) WT 3 must **do the following:**

(A) Be monitored daily by a dependable person or automated system. ~~and~~

(B) Have a certified operator on site for a minimum of five (5) daily visits every week.



(7) WT 4 must have a certified operator on site during water treatment plant operation unless the plant is equipped with an automated system approved by the commissioner.

(8) WT 5 must have a certified operator on site during water treatment plant operation unless the plant is equipped with an automated system approved by the commissioner.

(c) **When requested by the commissioner, ~~may request~~ the certified operator shall provide** written submission documenting the following:

(1) The name, location, and classification of each water treatment plant and water distribution system under the responsible charge of a certified operator.

(2) The amount of time that a certified operator in responsible charge spends at a facility of responsibility identified according to subdivision (1).

(d) The commissioner shall evaluate information required by this section and any other information pertinent to a water treatment plant or water distribution system under the supervision of a certified operator in responsible charge ~~of multiple facilities~~ and may determine the following:

(1) The time ~~provided for supervision~~ **spent on site during a daily visit** is inadequate **for the duties required to properly operate the system in compliance with 327 IAC 8.**

(2) An amount of time that the certified operator in responsible charge shall be required to spend in the operation of each water treatment plant or water distribution system **where the operator is in charge of more than one (1) system.**

(3) A reduction of the number of water treatment plants or water distribution systems over which the certified operator may have responsible charge.

(4) ~~A reduction of~~ The number of daily ~~site visits to be~~ **required under subsection (b)(1) through (b)(6) may be modified** by the ~~certified operator~~ **commissioner on a case-by-case basis.**

*(Water Pollution Control Board; 327 IAC 8-12-3.6; filed Nov 20, 2000, 4:11 p.m.: 24 IR 982)*

SECTION 15. 327 IAC 8-12-4 IS AMENDED TO READ AS FOLLOWS:

**327 IAC 8-12-4 Examination of applicants to become a certified operator of a water treatment plant or water distribution system**

**Authority: IC 13-14-8; IC 13-18-11-1.5; IC 13-18-11-13**

**Affected: IC 13-18-11**

Sec. 4. (a) A standardized examination prepared to reflect the duties and responsibilities required of each grade of water treatment plant and water distribution system certified operator shall be **as follows:**

(1) Used to test knowledge, ability, and judgment of an applicant to become a water treatment plant or water distribution system certified operator.

(2) Conducted at least annually. ~~and~~

(3) Held at places and times established by the commissioner:

(A) with at least sixty (60) days advanced announcement; and

(B) except in such cases as may be declared necessary exceptions by the

commissioner.

(b) A person wishing to be examined for water treatment plant or water distribution system certification shall fulfill the following requirements:

(1) Complete an application on a form approved by the commissioner that:

(A) contains true and accurate information to the best of the applicant's knowledge; and

(B) is free of omissions and misrepresentations, either of which may result in rejection of the application or revocation of any certificate previously granted.

(2) Submit a completed application, with the necessary fee, to the commissioner **postmarked** not later than forty-five (45) days preceding the date of the examination.

(c) The commissioner shall **do the following**:

(1) Review an application and supporting documents concerning the eligibility of an applicant for water treatment plant or water distribution system certification. ~~and~~

(2) Issue a written notification in the form of an admission slip, providing the time and place of the examination, to be presented by an applicant deemed eligible for examination.

(d) A person who has been notified and scheduled to take an examination:

(1) may submit a written request to the commissioner for a postponement to take the examination one (1) offering later than the examination granted by the commissioner if:

(A) the postponement:

(i) for a nonemergency reason is requested ~~no~~ **not** later than fourteen (14) days ~~prior to~~ **before** the examination date noticed to the applicant under subsection (c)(2); **and**

~~(B) the postponement~~ (ii) request for an emergency reason is submitted as soon as conditions of the emergency warrant; **and**

~~(C)~~ **(B)** the applicant:

(i) provides the commissioner an explicit description of extenuating circumstances necessitating the requested postponement; and

~~(D) the applicant~~ (ii) understands that only one (1) postponement shall be allowed; or

(2) will be considered to have failed that examination if ~~one (1) of the following occurs:~~  
**the person:**

(A) ~~The person~~ does not attend the examination and has not requested a postponement according to subdivision (1); **or**

(B) ~~The person~~ is caught cheating on an examination, an occurrence that will make an applicant ineligible to take any operator certification examination for a period of two (2) years following the examination date of the incidence of cheating.

(e) Completed examinations shall be managed by the commissioner according to the following:

(1) Graded in a manner prescribed by the commissioner with a minimum result of seventy percent (70%) needed in order to pass the examination.

(2) The commissioner shall notify an applicant of the examination result **as follows**:

(A) In writing. ~~and~~

(B) ~~no~~ **Not** later than two (2) months after the date of the examination.

(3) Examination papers shall be retained by the commissioner with an opportunity afforded to an applicant notified of having failed the examination for review of the graded examination until a date ninety (90) days ~~prior to~~ **before** the next scheduled examination if the applicant submits the following to the commissioner:

(A) A written request for review of the graded examination.

(B) A statement affirming the applicant's understanding that examination review does not include the right to copy, by any means, **the following**:

(i) The examination. ~~or~~

(ii) Any portion of it: **the examination.**

(f) A person previously certified as a water treatment plant or water distribution system operator under this rule but who has failed to meet the renewal requirements **within a grace period of one (1) year** according to section ~~7(e)(3)~~ **7(e)(4)** of this rule must

~~(1) retake an examination. and~~

~~(2) meet the renewal requirements of section 7(e)(3) of this rule, including an amount of continuing education equivalent to that required for one (1) renewal period, as specified in section 7.5 of this rule;~~

~~within a grace period of one (1) year. (Water Pollution Control Board; 327 IAC 8-12-4; filed Sep 24, 1987, 3:00 p.m.: 11 IR 723; filed Sep 19, 1990, 3:00 p.m.: 14 IR 265; filed Dec 12, 1994, 4:39 p.m.: 18 IR 1235; filed Nov 20, 2000, 4:11 p.m.: 24 IR 984)~~

SECTION 16. 327 IAC 8-12-4.5 IS ADDED TO READ AS FOLLOWS:

**327 IAC 8-12-4.5 Demonstration of proficiency for applicants to become a site-specific operator**

**Authority: IC 13-14-8; IC 13-18-11-1.5; IC 13-18-11-13**

**Affected: IC 13-18-11**

**Sec. 4.5. (a) A person may become certified as a site-specific operator (SSO) by a demonstration of proficiency:**

**(1) through an examination;**

**(2) based on completion of an approved training course; or**

**(3) through another method approved by the commissioner.**

**(b) A standardized examination prepared to reflect the duties and responsibilities required of each SSO water treatment plant and water distribution system certified operator shall be as follows:**

**(1) Conducted at least annually.**

**(2) Held at places and times established by the commissioner.**

**(c) A person wishing to apply for water treatment plant or water distribution system SSO certification shall fulfill the following requirements:**

- (1) Complete an application on a form approved by the commissioner that:**
  - (A) contains true and accurate information to the best of the applicant's knowledge; and**
  - (B) is free of omissions and misrepresentations, either of which may result in rejection of the application or revocation of any certificate previously granted.**
- (2) Submit the following:**
  - (A) A completed application, with the necessary fee, to the commissioner.**
  - (B) Any additional information requested by the commissioner.**

*(Water Pollution Control Board; 327 IAC 8-12-4.5)*

SECTION 17. 327 IAC 8-12-6 IS AMENDED TO READ AS FOLLOWS:

**327 IAC 8-12-6 Certification; reciprocity; provisional certificate**

**Authority: IC 13-14-8; IC 13-18-11-1.5; IC 13-18-11-13**

**Affected: IC 13-18-11-9**

Sec. 6. (a) The commissioner shall issue a certificate designating competency in the appropriate certified operator's grade to each person who makes proper application if the applicant:

- (1) meets the necessary requirements of education and experience; and**
- (2) successfully completes a grade appropriate examination.**

Upon successful completion of examination according to section 4 of this rule, the commissioner shall issue a certification in the certified operator grade in which the applicant was examined.

(b) The commissioner may issue a certificate by reciprocity as outlined in IC 13-18-11-9 if the following conditions are met:

- (1) A person seeking reciprocal certification submits an application for such a certificate that includes the following:**

- (A) Proof of current certification.**
- (B) Grade of the applicant.**

- (2) A person from another state seeking a certificate by reciprocity earns the number of continuing education contact hours for all future renewal periods, in the time period required by section 7.5(a) of this rule, though no continuing education contact hours shall be required at the time of conferring the reciprocal certification.**

(c) The commissioner may issue a provisional water treatment plant or water distribution operator's certificate if the following occur:

- (1) The governing body or owner of a water treatment plant or water distribution system submits a written request specifying the existence of the vacancy and a reason necessitating the provisional certification, including one (1) of the following:**

- (A) To fill a vacancy created by death.**
- (B) Resignation of the certified operator in responsible charge.**
- (C) Extended illness of the certified operator in responsible charge.**

- (D) A justifiable cause due to ~~unforeseen~~ **unforeseen** circumstances beyond the control of the governing body or owner that leaves the treatment plant or distribution system without a certified operator.
- (2) The written request required by subdivision (1) provides the name, education, and experience of the person for whom the provisional certificate is requested.
- (3) The provisional certificate nominee named under subdivision (2):
  - (A) submits, simultaneously with the request submitted under subdivision (1), an application as required by section 4(b) of this rule requesting examination and certification; **and**
  - ~~(4) The provisional certificate nominee named under subdivision (2)~~ (B) is eligible at the time of the request submitted under subdivision (1) for the next scheduled certification examination.
- (d) A provisional certificate shall be **as follows**:
  - (1) Issued by the commissioner in the form of a letter that specifies the conditions of the certification. ~~and~~
  - (2) Valid for ~~the shorter one~~ **(1)** of the following lengths of time **as determined by the commissioner**:
    - (A) The period between the:
      - (i) date of application; and
      - (ii) the end of the thirty (30) day grading period following the next examination that is available to the provisional certificate nominee.
    - (B) One (1) year.
    - (C) **Another time period designated by the commissioner.**
  - (e) **The commissioner may also issue a provisional water treatment plant or water distribution operator's certificate if the following occur:**
    - (1) **The classification of a treatment plant or water distribution system changes due to the following:**
      - (A) **Installation of treatment to meet a new requirement of the Safe Drinking Water Act (42 U.S.C. 300f and 42 U.S.C. 300j-26) or 327 IAC 8.**
      - (B) **An increase in the population served that:**
        - (i) **is not the result of consolidation of one (1) or more public water systems; and**
        - (ii) **is less than ten percent (10%) of population previously served.**
    - (2) **The written request required by subdivision (1)(A) provides the name, education, and experience of the person for whom the provisional certificate is requested.**
    - (3) **The provisional certificate nominee named under subdivision (1)(B) submits, simultaneously with the request submitted under subdivision (1)(A), an application as required by section 4(b) of this rule requesting examination and certification.**
    - (f) **The commissioner may waive the hands-on experience requirements for application for the examination for the new treatment classification for the provisional certificate nominee.**

(g) A provisional certificate must be as follows:

(1) Issued by the commissioner in the form of a letter that specifies the conditions of the certification.

(2) Valid for one (1) of the following lengths of time as determined by the commissioner:

(A) The period between the:

(i) date of application; and

(ii) end of the thirty (30) day grading period following the next examination that is available to the provisional certificate nominee.

(B) One (1) year.

(C) Another time period designated by the commissioner.

(3) Granted only for continued operation of a system where the classification has changed subsection (e) if the operator demonstrates to the commissioner that the facility will be properly operated.

*(Water Pollution Control Board; 327 IAC 8-12-6; filed Sep 24, 1987, 3:00 p.m.: 11 IR 724; filed Sep 19, 1990, 3:00 p.m.: 14 IR 266; filed Dec 12, 1994, 4:39 p.m.: 18 IR 1236; filed Nov 20, 2000, 4:11 p.m.: 24 IR 985)*

SECTION 18. 327 IAC 8-12-7 IS AMENDED TO READ AS FOLLOWS:

### **327 IAC 8-12-7 Certificates and certification cards; renewal; duplicates**

**Authority: IC 13-14-8; IC 13-18-11-1.5; IC 13-18-11-13**

**Affected: IC 13-18-11-6.5**

Sec. 7. (a) A water treatment plant and water distribution system operator's certificate shall **be as follows:**

(1) Be issued after an applicant's successful completion of the grade appropriate examination.

(2) Specify **the following:**

(A) The month and year that the applicant qualified. ~~and~~

(B) The issuance date of the certificate.

(3) Be permanent in nature but will be effective only when validated by a current certification card. ~~and~~

(4) Not be valid if obtained:

(A) through fraud ~~or~~ deceit; or

(B) by the submission of inaccurate data on the application.

(b) A water treatment plant or water distribution system certified operator must **do the following:**

(1) Provide permanent and visible display of his or her certificate at the water treatment plant or water distribution system office. ~~and~~

(2) Obtain a duplicate certificate to display in the office of each water treatment plant and water distribution system supervised if the certified operator supervises more than one (1)

water treatment plant or water distribution system.

(c) A certification card shall **be as follows**:

(1) Be issued **as follows**:

(A) Simultaneously with the certificate.

~~(2) be issued~~ (B) For a time period of ~~no~~ **not** more than thirty-six (36) months.

~~and~~

~~(3)~~ (2) Expire on the last day of June nearest the end of the triennial period following issuance.

(d) A water treatment plant or water distribution system certified operator needing a replacement or duplicate certificate ~~must~~ or card **must** submit a written request to the commissioner that includes:

(1) The following information:

(A) The grade of the water treatment plant or water distribution system certified operator.

(B) The name and classification of the water treatment plant or water distribution system to be operated.

(C) The date of issuance of the original certificate if known.

(D) The certificate number.

(2) A fee specified according to section 5(a)(4) or 5(a)(5) of this rule.

(e) The commissioner shall accomplish the following:

(1) Issue to each certified operator of a water treatment plant or water distribution system a renewal notification stating the following:

(A) The expiration date of the certified operator's certification card.

(B) The amount of the fee required for certification card renewal.

(2) Mail certification card renewal notifications **as follows**:

(A) At least thirty (30) days ~~prior to~~ **before the** expiration of the certification card. ~~and~~

(B) To the last known address filed with the commissioner.

(3) Renew a certification card if:

(A) the continuing education requirements of section 7.5 of this rule are met;

(B) a renewal fee described in section 5(a)(3) of this rule is submitted to the commissioner on or before the first day of July of the triennial period for which a certification card is to be issued; and

(C) the notice is signed and returned by the certified operator to the commissioner.

(4) Reinstate certification if the operator **does the following**:

(A) Submits payment of **the following**:

(i) Any arrearage of fees.

~~(B) Submits payment of~~ (ii) The current renewal fee.

~~(C) passes the grade appropriate examination;~~

~~(D)~~ (B) Fulfills arrearage of continuing education credit requirements. ~~and~~

~~(E)~~ (C) Is current in meeting continuing education credit requirements.

(5) Deny renewal of a certification card that is not renewed within the time limit established in section 7.5(a) of this rule and ~~IC 13-18-11-6(c)~~ **unless the IC 13-18-11-6.5(c). An operator pursues reinstatement through reapplication may reapply and reexamination retake the examination** following the requirements of section 4 of this rule.

*(Water Pollution Control Board; 327 IAC 8-12-7; filed Sep 24, 1987, 3:00 p.m.: 11 IR 724; filed Sep 19, 1990, 3:00 p.m.: 14 IR 267; filed Dec 12, 1994, 4:39 p.m.: 18 IR 1236; filed Nov 20, 2000, 4:11 p.m.: 24 IR 986)*

SECTION 19. 327 IAC 8-12-7.5 IS AMENDED TO READ AS FOLLOWS:

**327 IAC 8-12-7.5 Continuing education requirements**

**Authority:** IC 13-14-8; IC 13-18-11-1.5; IC 13-18-11-6.5; IC 13-18-11-13

**Affected:** IC 13-18-11

Sec. 7.5. (a) All water treatment plant and water distribution system certified operators shall fulfill continuing education requirements in amounts specified in Table 7.5(b) in subsection (b):

(1) during each three (3) year period following the issuance of the certification card; and  
~~prior to~~

(2) **before** having that certification card renewed.

(b) Continuing education credits required for certification card renewal in the grades of water treatment plant and water distribution system certified operators are listed in the following table:

Table 7.5(b)	
Certified Operator Grades, Water Distribution System and Water Treatment Plant	Continuing Education Credits Required for Renewal
Grade O.I.T.	Contact hours shall match those required for the classification where operator is in training; certification card not renewable
<b>Grade SSO</b>	<b>10 contact hours</b>
Grade DSS	10 contact hours



Grade DSM	15 contact hours
Grade DSL	15 contact hours
Grade WT 1	10 contact hours
Grade WT 2	15 contact hours
Grade WT 3	25 contact hours
Grade WT 4	30 contact hours
Grade WT 5	30 contact hours
Grade WT 6	30 contact hours

(c) Continuing education credits required according to Table 7.5(b) in subsection (b) must adhere to a distribution of subject matter according to the following:

(1) A minimum of seventy percent (70%) of the required continuing education contact hours shall be obtained from the technical category of approved continuing education courses.

(2) ~~No~~ **Not** more than thirty percent (30%) of the required continuing education contact hours shall be obtained from nontechnical subject matter of approved continuing education courses.

(d) A person having a valid certification card in more than one (1) classification of water treatment plant or water distribution system:

(1) may be given duplicate continuing education credit from a single approved continuing education course for each water treatment plant and water distribution system certification to which the subject matter is applicable; and

(2) must obtain the greatest number of continuing education contact hours required by the various certifications held within the shared time period of overlap in order not to be required to obtain continuing education for each certificate held.

*(Water Pollution Control Board; 327 IAC 8-12-7.5; filed Nov 20, 2000, 4:11 p.m.: 24 IR 989)*